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ABSTRACT

This study explores some of the relationships of the task structure in organizations to the allocation of power, job satisfaction, and perceptions of rewards. Six elementary schools in three school districts in a Midwestern State were studied. Three schools were "traditional," the others were multiunit schools. Questionnaires were administered to 132 elementary school personnel asking them to (1) list the main tasks that they performed; (2) nominate people in the school that they felt had power of three types--authority, influence, and esteem; and (3) answer questions concerning job satisfaction and the types of behavior that they perceived as being rewarded by administrators and teachers. The study supports, to some extent, the relationship between the task structure and power allocation. Three basic findings that support the need for further research are: (1) Influence and esteem seem to be related to the same task factor in the schools; (2) power seems to be located in the same task factor where fewer people score high; and (3) of the three power variables, authority seems to be more closely related to "official title." (Author/MF)

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TASK STRUCTURE, ALLOCATION OF POWER, AND SATISFACTION OF ORGANIZATION MEMBERS IN SIX SCHOOLS

Charles Jackson Dudley

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CHAPTER I

BACKGROUND AND THEORY

The study of organization is one of the more engaging, yet frustrating, fields in sociology today. It seems strange that, with such a well developed literature, certain basic elements of organizational arrangements remain elusive to the behavioral scientist. This "elusiveness" may come from an inadequate relationship between "organizational theory" and "organizational research." Some areas of theory have so far surpassed the research that the theory has become assumed fact, and/or the theory has become a descriptive technique (Brown, 1964).

One of the most obvious examples of the above point is that set of concepts that has to do with the division of labor in organization (task structure, position, etc.). While these concepts are supposedly basic to the study of organization in the sense that they differentiate the "schools" of organizational theory, there is little empirical understanding of the manner in which these concepts relate to other organizational phenomena. To demonstrate the relationship between the task structure of individual organization members and power allocation, job satisfaction and perceptions of rewards will be the primary goal of this dissertation.

A word of explanation concerning the concept of the task structure needs to be made early in the report. The task structure, as it is used in this dissertation, refers to the allocation of tasks to individuals in an organization. This concept differs somewhat from the usual conceptions of the division of labor in two ways.

(1) The division of labor as a concept requires, in most cases, that the goals of the organization be specified. The tasks are divided among people in order to achieve, as efficiently as possible, the goals of the organization. The division of labor, then, is an organizational variable only.

The task structure is not limited to an organizational framework. Task structure--those tasks that are performed by people--can be analyzed using the individual, the group, or the organization, as the unit of analysis. The basis of the task structure is not only the goals of the management hierarchy in the organization, but also the goals of individuals and groups. The task structure cannot be theoretically separated from the division of labor, but it can, as the report attempts, be empirically studied as an entity in itself.

(2) The concept of task structure also differs from previous studies in that what people do in organizations is structurally related. Most studies argue that the person actually operates in one of two organizational systems--the formal and the informal--and that while performance in one system or the other is structurally consistent, the relationships between the two systems may not be. As shall be demonstrated throughout this dissertation, all the tasks performed by an individual, in a group or in the organization, bear a structural relationship to each other.

In the remaining part of this chapter, the relevant literature will be discussed on the organizational framework developed and the postulates to be tested.

Review of the Literature

Of primary concern to this study is the task structure of individual organization members. This concept cannot be isolated, of course, from the division of labor, and, for that reason, the review of the literature will include a discussion of both concepts.

The first men to study the division of labor and task structure were more concerned with the organizational benefits accrued from the restructuring of tasks among organization members than with possible benefits or consequences of such a restructuring for the worker. Adam Smith was one of the earlier writers to note the benefits of the division of labor for the organization. In The Wealth of Nations (1776), he noted that the manufacture of household pins could be greatly increased if each worker completed only a part of the process of manufacture, rather than the entire process. At the time, the beginnings of industrial development, this was an appealing argument. In later years, Smith's notion of the division of labor provided the underpinnings for the Scientific Management School of organizational theory (Etzioni, 1964:22).

In the late 19th and early 20th centuries, Max Weber contributed an explication of one of the more profound developments in organizational theory: the concept of bureaucracy. Many writers today claim that Weber, in developing the notion of bureaucracy, created a "school" of organizational theory (Thompson, 1967:5). This idea is discounted here, and "bureaucracy" is seen as a more general framework employed by researchers in most "schools" of organizational theory. Basic to the concept of bureaucracy are such notions as centrality of control, categorization of task performance by client types,[1] and the creation of offices of jurisdiction. Most complex organizations apply these ideas at least to some degree.

In addition to the concept of bureaucracy, Weber implicitly makes one other point that is central to the present study. While he does not directly state that the authority structure of the organization is a part of the division of labor, his discussions often give this impression. This idea is one that is often forgotten in organizational studies, but one that is essential in the present study. The obligation to make decisions is as much a part of the task structure of an organization member as any other task they are required to do. Weber's work is a benchmark for organizational theorists (cf. Weber, 1964).

Overlapping Weber's work was the publication by Taylor of Scientific Management (1911). This work marked the beginnings of the Scientific Management School and the idea that the organization could be a totally determinate and therefore wholly rational system. Taylor posited that Man and Machine were the same, and that the only criterion for success or failure of the organization was efficiency. Whatever division of labor that provided for the greatest production at the least cost was the best division of labor. The division of labor was a primary concern of the Scientific Management School, and later writers determined that the criterion for deciding the allocation of tasks for organization members and machines was process oriented--not people oriented. If the production unit was telephones, then the process of assembling them was broken down into the most efficient set of tasks and a man (or machine) would be assigned to each task or set of tasks. There were four criteria for a division of labor:

---

[1] The categorization of task performance by client types will be of importance to the conceptualization of the present research problem.

(1) The purpose of a task - members of the organization that had the same goals or sub-goals should be located together;

(2) the process involved - those processes requiring similar skills should be grouped together;

(3) the clientele - all work directed toward a specific group should be grouped together;

(4) geographical area - all jobs that had to be done in a particular area should be grouped together (Gulick and Urwick, 1937).

It is not difficult to see that these were prescriptions rather than descriptions, and most organizations were based on several of these criteria rather than one. In addition, it should be noted that considerations of the humanness of man, that is, the social needs of man, are not considered. Taken together with Weber's centrality of control ideas, it is easy to see that the Scientific Management School was what Thompson (1967:5) would call a "closed strategy," and what Etzioni (1964:22-31) would call a "formal systems approach."

One additional note on the division of labor in the closed system strategy represented by the Classical Organizational Theorists: the motivation of man towards the work of the organization was considered to be completely provided for by the economic rewards that he was to receive. One of the great problems the Scientific Management School tried to deal with was centered around which method of paying employees would increase production. By considering man economically motivated, the system could remain a closed one; that is, motivation could be controlled by the organization.

As a reaction to the Scientific Management School, Elton Mayo, Kurt Lewin and John Dewey, with others, initiated an approach to organizational theory that was later to become the Human Relations School. As the title implies, and as the founder's theoretical directions should indicate, the primary interest of this School was to demonstrate that the men who worked in the organization were different from the machines that the organizations used. Etzioni (1964) indicates that there were "discoveries" by Mayo and associates that brought into question the very foundation of the Scientific Management School:

(1) The workers' capabilities are determined by social "stamina" rather than physical "stamina;"

(2) non-economic rewards play a central role in the motivation of the organization member;

(3) the greatest degree of specialization is by no means the best division of labor possible;

(4) workers do not react to management and rewards as individuals, but rather as members of a group.

The crushing blow of these findings on the Scientific Management School was heightened by a series of studies that followed in the Human Relations tradition (See Roethlisberger and Dixon, 1939; Coch and French, 1952:40; Lewin, 1952; Lippitt and White, 1952; and Whyte, 1955).

As Thompson (1967) points out, the Human Relations School was an example of a "natural system approach." Etzioni (1960, 1964) and others tend to refer to this type of school as informal organization. Whatever name it is called, it is the case that the Human Relations School represents a non-determinate system. People bring to the organization the possibility of the unexpected. In addition, the broader social system, the community and the society, represents a chance for the organization to experience unexpected consequences of its own actions (Dubin, 1968) or the actions of others (for example, fluctuations in the stock market for business organizations, or the defeat of school boards in an election, etc.). The evidence as seen by the Human Relations School was that the organizations were not determinate systems.

The result of having two opposing views was the development of the notion that organizations had essentially two behavioral and/or prescriptive systems: formal and informal. The formal system was considered determinate and is graphically represented by a formal organization chart. In other words, the organization is based on the categorization of people into positions based on the major task of that person; for example, the "position of teacher." The informal organization is a natural system (a less determinate system) and is best graphically shown by a series of sociometric diagrams. Positions are defined not by the major task of a person, but by the types of relationships that exist between people interacting in organizations. These two very different systems of labelling are not brought together by either the Classical School or the Human Relations School.

In the past few paragraphs, concepts such as "closed system strategy," "determinate systems," etc., have been discussed. Briefly, these are ways of classifying the various approaches to the study of organizations. Thompson (1967:5-10) sees students of organization as having one of three strategies: closed system, open system, and (a more recent development), the bounded rational system. The first two coincide with the two schools of thought just discussed, and the third is becoming the new and moderating approach to the study of organizations.

The closed system strategy refers primarily to viewing the organization as a determinate system. Much of the research that has been generated by the Scientific Management School of organizational theory is in the name of efficiency, and it is this School that we will associate with the closed system strategy. This School most closely approximates the assumptions of a closed system--that is, all of the variables that are needed are known, and the system can operate under the norms of rationality entirely, or very nearly so (See Thompson, 1967).

The open system strategy represents the reverse--that is, in the organization there is "the expectation of uncertainty" (Thompson, 1967). Those variables that need to be controlled are not completely known, and even if known, control cannot be exerted over them. The Human Relations School typifies this type of strategy.

The newest strategy in the study of organizations is one that moderates the extremes of the closed and open system strategies. The bounded rational system views organizations as having to deal with uncertainty, but attempting to effect closure so that the rules of rationality can be observed (Thompson, 1967:8). The writings of Barnard (1938), Simon (1957), and March and Simon (1958) are central sources in this school of thought.

To round out this brief review of the literature and to make it more applicable to the present study, a brief review and expansion of the preceeding discussion is necessary.

The formal organization is largely prescriptive. That is to say, the division of labor, the hierarchy, the communications network, etc., of an organization are formally prescribed in order to achieve greatest efficiency in the organization. People are placed into groups and are given a position in that group in order to maximize the efficiency of that group's production. There are as many positions in a group as necessary to perform all of the known functions required of that group, but there are no extra positions. In the organization, there are one or more extra-mural roles in some positions (Bates, 1960) whose job it is to relate that group to other groups, both in and out of the organization. The great failure of the Scientific Management School and other closed system strategies was the failure to recognize that people may belong to more than one group in an organization and the consequences of this multi-group membership to the organization.

The Human Relations School and other "natural or open strategy" schools on the other hand, recognized this problem, and viewed with great perception the other systems of groups in the organization. Studies of cliques (Roethlisberger and Dixon, 1939; Dubin, 1968); of status groups (Roethlisberger and Dixon, 1939; Etzioni, 1960); of friendship patterns, etc., were common types of studies. The main failure of the Human Relations School was not recognizing that, to some extent, these relationships were a result of the formal authority and division of labor structures in organizations.

During the development of these schools of thought in organizational studies, sociologists and social psychologists were beginning to do a number of studies of group structure (See Biddle and Thomas, 1966). These studies under the name of "role theory" allowed for very fine distinctions to be made in terms of levels of social organization. Linton (1945), Davis

(1948), Parsons (1951), and Merton (1957) were among the early adherents of the structuralist-functionalist way of thinking to use and to clarify the concepts of status, role, position, etc. Perhaps the most complete system of analysis based on the concept of role is that developed by Bates (1967). Underlying Bates' notions of social organization, we find the same two themes proposed by the Scientific Management School and the Human Relations School of organizational theory, but Bates refers to them as "system-centered analysis" and "person-centered analysis," respectively (Bates, 1962). Again, there was the recognition of two systems; the notion that the organization places people into positions rationally, but that the organizational placement of individuals may be reacted to by organization members in what may be considered for the organization an irrational manner. The notions of person-centered analysis and system-centered analysis will be of importance in developing the present research.

As indicated, there are two major schools of organizational theory that look at the organization from two divergent points of view: informal and formal systems. It is believed that this has led to a number of problems in both theoretical formulation and empirical study. The third major school that notes the relationship between formal and informal systems, and views of the organization as a single, bounded rational system will be the basis of this study of the task structure.

In order to complete the perspective needed for this study, an elaboration of the preceeding might prove useful. Because of the divergence of the schools of organizational theory, and the theoretical debates in other areas of sociology (for example, role theory), those concepts that are related to the division of labor have become difficult to use as analytical tools. As an example, I point to the concept of positions. Theoretically, position has been defined as all of those role relationships one has in a single group (Bates, 1957; Merton, 1957; Gross, 1958). Empirically, this is not the position that one studies. Most frequently, researchers use a category of people and call that category a position. In studies of schools, there is the tendency for those people who teach to be given the "position" of teachers. That is to say, the person is assigned a position according to only one activity (in schools) in which he participates. (It should be evident that the theoretical definition in current vogue among organizational analysts comes from the open system strategy, but that the empirical concept comes from the closed system strategy of organizational theory.) If a study of the task structure is to prove useful, then better operationalization of such concepts as "position" needs to be made. The method used in this research should correct some of these basic problems.

In the past few paragraphs, the development of several schools of organizational theory have been discussed with emphasis on the development of the concepts of the division of labor and task structure. In order to put these into a framework that will be of use in the present study, the next few paragraphs will deal with an organizational perspective. Following that, a series of postulates concerning the relationship between the task structure of organization members and the allocation of power and the satisfaction of organization members will be discussed.

An Organizational Perspective

The organization is a set of positions and the relationships between those positions. Basically, the positions are arranged to make it possible to achieve some purpose more efficiently than an individual working alone could. The relation between positions is rather complex, in the sense that in organizations every position is not directly related to every other position. In other words, the organization is a multi-group structure. Groups are centered around various tasks and every position in a group bears some relationship to the tasks performed by that group. There are vertical groups and horizontal groups. The lowest vertical groups usually are the production groups, and the higher groups are coordinative groups. The horizontal groupings are task related in the sense that the process of completing some task is divided up and each part of the process is allocated to a specific group.

There are two types of contingencies that the organization must be prepared to meet: (1) those that are known and (2) those that are unknown. Both types of contingencies are problems for various groups in the organization. Since the organization cannot be aware of all contingencies, it cannot provide the necessary group structure to meet them. Therefore, the organization consists of more groups than those that are rationally planned (than those shown by the organizational chart). If one is to understand the operation of an organization, he must be able to identify all of the groups in the system.

It makes little analytical sense to say that there are two divisions of labor in an organization (one "formal;" one "informal") when there is only one set of people who are influenced by several prescriptive systems. If, for the operation of the organization, it is necessary to meet both known and unknown contingencies, then the way the labor is divided among this single set of workers for meeting these contingencies is the task structure. Therefore, the distinction between formal and informal organization will not be considered a viable analytical tool for the present research. For now, the organization will be defined as a social system working in the interest of achieving some goal(s) and consisting of a set of groups that effects a task structure for dealing with both known and unknown contingencies.

In addition, further consideration must be given to the hierarchical arrangement of the organization. Many researchers, while doing research, consider the division of labor the breakdown of the production process only. This does not seem to be theoretically consistent. Because organizations must coordinate the production process, a hierarchy is necessary. The more specific the tasks that must be performed in pursuit of a single product, the more complex the hierarchy above that production process. This hierarchy is not only a result of the division of labor, but also is a part of it. It is known that unexpected contingencies arise in organizations. Part of the functioning of the hierarchy is to deal with and/or to communicate these contingencies. Since we indicated that groups are responsible for a part of the production, then all unexpected contingencies that are specific to that group may only be dealt with by that group. Thus some degree of autonomy must exist at all levels in the organization. The more pervasive the contingency the higher in the hierarchy (the authority structure) the decision will be made. This sounds like straight Scientific Management School reasoning until it is remembered that all groups in the organization (including those formerly referred to as "informal") are included as part of the division of labor. It follows that if the organization does not know what decision-making group will be necessary to meet the needs of the system, then groups will be formed to meet arising contingencies when they occur. For instance, if one of the determinates of efficient production is worker satisfaction, and the conditions creating worker satisfaction are not known, then some new decision-making group dealing with specifically this problem will be needed.

Essentially, what has been said is that the term organization and the term division of labor almost refer to the same concept. It should not be the case that sociologists would refer to one type of behavior as "formal" and another type of behavior as "informal" because one part of the organizational behavior is not officially decreed as the way workers "should" behave--the organization is a behavioral system that is influenced by many prescriptive systems, not one.

The same notion applies to the task structure; that is, it is developed from several prescriptive systems. The prescriptive system that is developed by engineers who design the work flow or the system that the management provides are not the only sets of prescriptions for the organization members. In addition, those prescriptions that arise in groups developed within the organization (formerly, informal organizations), those prescriptions on the worker that restrict his organizational behavior (religious, familial, etc.), and those prescriptions from organizations that are related to primary organization (i.e. union to plant, Sunday school to church, educational association to school) all provide inputs that lead to one behavioral system. Since it is the behavioral system that is of concern here, then no distinction between these prescriptive systems will, for the present research, be analytically useful.

Perhaps the first argument against this approach would be that there would be a natural conflict between the organization prescriptions and the prescriptions from other sources, and that, by not accounting for the two types of prescriptions, we will, analytically speaking, "lose something." There is no argument that the type of study that considers the conflict between these different prescriptive systems would not be useful and are not needed. But by separating the systems into formal and informal, sociologists have not been able to focus on what people _do_, but only on what they should or should not do in terms of one prescriptive system. This research, as shall be seen, deals with what people _do_, and on the effects of what they do on other variables. In other words, in studies of the prescriptions of the division of labor, the behavior is the dependent variable. In this study it is the independent variable.

At this point, enough background information has been given for the research itself to be described. To briefly summarize, the perspective used in this research contains four basic points: (1) The organization is a bounded rational system that attempts to follow rules of rationality in situations where the unexpected must be expected. (2) From this, the view of the organization as having both formal and informal prescriptive systems is discarded and the organization is seen as one behavioral system with one division of labor. (3) The hierarchical arrangements in the organization are seen as part of the division of labor, rather than viewing the division of labor as related only to the actual production process. (4) The division of labor in an organization is directly related to the task structure of individuals in the sense that the division of labor by the organizational rules determines _in part_ the task structure of the organization member. Other factors that determine the task structure of the individual are values, attitudes and norms from prescriptive systems other than the organization.

To make this fourth point clear, the school teacher is a perfect example. The school may require that the teacher do many different tasks: collect lunch money, teach subjects, perform clerical-type duties, etc. But, the actual process by which these tasks are performed may be defined by her beliefs about how a teacher should act. If she is class-oriented, then the task of teaching may involve lecturing most of the time; but if she is child-oriented, then it may involve individual instruction to children most of the time. As was earlier stated: the behavior of individuals in organizations (the task structure) is directed by many prescriptive systems, not just one. To study the relationship of an individual's task structure to other variables in the organization requires research to take into account all behavior.

From this brief discussion of an organizational perspective the proposed research can be delineated more specifically.

The Postulates

Following what has been said above, it is now possible to formulate several postulates that provide, within an empirical framework to be discussed in a later section, a chance to further describe and delineate some of the relations that exist between the task structure in organizations and other organizational variables. These postulates will be broken into two major groupings. The statements concerning the relationships between the task structure of organization members and power relations in the organization will not be considered exploratory. The studies concerning these relationships are so pervasive that to argue exploratory relationships would be a meaningless enterprise. On the other hand, those postulates referring to the relationships between task structure and job satisfaction and perceptions of reward systems will be considered much more exploratory; in other words, it is hoped that the result of looking at these variables will propose new ways of trying to understand these variables rather than a more complete explanation. It should be noted, however, that in the case of all variables, the research is of an inductive nature rather than deductive.

Postulate 1. The allocation of power in an organization is associated to the task structure of organization members.

As was indicated at the beginning of this proposal, this should not be a surprise. This postulate is an old one, coming from such early writers as Marx and Weber, but it is a postulate that has not been put to adequate empirical test. Nor have the power relations of various types been used to further explain power relations in terms of the task structure. In the following corollary postulates, three aspects of power relations and their relationships to the division of labor will be briefly outlined.

Postulate 1A. The allocation of authority is associated with the task structure of organization members.

There should be no argument about this relationship if only those relationships which were formerly described as "formal" were involved. However, the use of the word authority in this dissertation will connote those relationships that are superordinate-subordinate where the relationship is agreed upon by all members of the acting group (See Dubin, 1968). It is not necessary for an individual to be "given" authority by the formal system (the bureaucracy); but in any relationship that involves the necessity of a decision-maker(s), if all people involved agree as to who among them should make that decision, then that relationship will be referred to as authority relations and the designated individual will be noted as the authority.

In all groups where alternatives to behavior are present there will be an authority system. The agreement, by the group, as to who will have authority may be made by several methods: (1) imposed on the group by a larger system (i.e. the foreman in the factory), (2) decided internally by the group using the criterion of reward or responsibility (i.e. that person who will gain most by the group's action or lose most by the group's inaction will be given authority), (3) made internal to the group on the basis of differential technical competence within the group. It is important to note that the authority relations are closely tied to other types of power relations.

Postulate 1B. The allocation of influence is associated with the task structure of organization members.

Influence, as it will be used in the present research, refers to the power one has to manipulate the system because the person has control of some resources in the system. The important distinction between our use of authority and influence is that people with influence are not given sanctioned power by the other members of the system (Dubin, 1969). In other words, with influence the source of the power is different than with authority.

It seems natural to assume that the influence given to a person in the system comes from the way that the labor in the organization is divided. For instance, if one or a few people in a school are math teachers, then they would have authority to make decisions concerning math instruction. By the same token, their authority to make those decisions and their control of the math teaching resources make it possible for them to influence the entire school curriculum. As shall be pointed out, these three concepts are operationalized in quite different ways.

Postulate 1C. The allocation of esteem in the organization is associated with the task structure of organization members.

Esteem is a concept that has been most frequently used in the sense of personal characteristics that give a person some degree of power (there are other concepts, such as Weber's [1923] "charisma," that indicate the same sort of idea). Age, experience, "good personality," and other characteristics of individuals would be a basis for power.

In the above postulates, three types of power have been discussed. The basis for making the distinctions in the three types of power is established in the literature. The actual viability of making these distinctions is, at best, questionable. The distinction between influence and authority seems to be a viable one, but whether or not "esteem" adds any explanatory distance beyond authority and influence is one of the questions of the present research.

The concepts of job satisfaction and perceptions of reward systems are added to the current list of postulates because sufficient data have been collected to test the viability of the connection between the task structure of organization members and these social psychological variables. The following postulates are made and are intended to be exploratory in nature, in that the actual direction of the relationship is not suggested by previous research to the extent of our other variables.

Postulate 2. The degree of job satisfaction that an organization member feels is associated with the task structure of organization members.

Postulate 3. The perceptions that organization members have of the organizational reward system are associated with the task structure of organization members.

CHAPTER II

THE STUDY

The Multiunit Schools and the "Traditional" Schools

The organizations that will be studied to determine the relationships between the task structure of organization members and the other variables are six elementary schools in Wisconsin. These schools are part of a larger sample of 54 schools drawn by the Attributes Projects, Program on Innovation and Organization, Center for the Advanced Study of Educational Administration. The author of this research participated in the Attributes Projects in all phases of its current research.

The reason that the Wisconsin schools were added to the Attributes Projects sample is because of the development of a new school organizational plan by the Wisconsin Center for Cognitive Learning, University of Wisconsin. The Multiunit School, as the new organizational system is called, is only one of several major innovative efforts being tried by various researchers in the United States today. The Multiunit system provides an excellent choice of schools for the present research in that, of all the innovations today, it seems to provide the most pervasive organizational change in school systems. In the following paragraphs, I will briefly describe both of the systems (Multiunit and traditional) and the six schools involved.

Traditional schools, as the term will be used here, refer to the elementary school that consists primarily of relatively autonomous teachers and a principal with support personnel. The organization of the school does not provide for required relationships between teachers in the school, not even within a grade level. The relationship the teacher has to the school is maintained by relationships with the principal. There are three traditional schools included in the present study. The three schools come from different school districts in Wisconsin.

In each case, there is a Multiunit School from the same district. In the Attributes Projects and the research teams from the University of Wisconsin, the pairing of the traditional school and the Multiunit School in the same district represents an attempt to establish an experimental-control situation for studying the Multiunit School. In the research proposed here, the schools were not matched on some of the variables critical to the task structure of organization members. Therefore, rather than consider the relationships between the schools as experimental-control, they will simply represent two different types of organizational systems attempting to achieve the same goals.

In the Multiunit School system, the organization of the school was changed considerably by the addition of three essentially new positions to the school and the combining of these positions with the positions already found in the school into new organizational forms. A complete explanation of the Multiunit system here would not serve a useful purpose, as one goal of this dissertation is to, in detail, do just that. The following paragraphs will provide only a general framework for the Multiunit School.

The Multiunit School, essentially, is supposed to be a system of dividing the students in school into units rather than into grades. Each unit has many ability groupings, and children are assigned to the ability group that best meets their needs in each subject matter area. The ability groupings that are developed in the Multiunit system of analysis are considerably different from the ability groupings (or "tracking") in the more usual connotation of the word. Usually when students are assigned to ability groups it is on the basis of their over-all performance, and the group is composed of "slow" or retarded learners, "average" learners, or "accelerated" learners. The students in the Multiunit system are placed into ability groupings in each subject matter area--and the ability group may differ from subject to subject.

Of greater importance to the current research is the fact that teachers are assigned to units--not classes or classrooms. The unit has assigned to it a number of teachers (from three to eight in the schools studied). In each unit there is, in addition, a unit leader, a clerical aide and an instructional aide. The responsibilities of the unit leader vary from school to school, but, in general, the unit leader takes both instructional leadership chores and administrative tasks from the principal. The aides assist the unit leaders and teachers by taking over a lot of the routine tasks that do not require, by either difficulty or legality, professional performance.

The principal in the Multiunit School is supposedly left with more time to become an instructional leader. Actually, as shall be demonstrated in greater detail later, the principal's role in the Multiunit structure is somewhat confused.

The Multiunit system is based on the notion that cooperative efforts among the teachers in the units and cooperative efforts among the unit leaders and the principal (the Instructional Improvement Committee) will provide for better opportunities for instruction, both on an individual and classroom level. In its conceptualization it is intended to be an organization with two major levels of coordination and authority; the unit and the Instructional Improvement Committee. In the present study these relationships that exist will be explored. One thing can be said with certainty: The Multiunit School more closely conforms to a bureaucratic model than the more traditional schools. In the following research, this fact will be taken into account.

The Six Elementary Schools

As indicated, the six elementary schools researched in this study come from three school districts in Wisconsin. The three districts are considerably different from each other. Johnstown is a relatively small town in the central southern portion of the state, Middle City is a larger city on the Lake Michigan shore, and Laketown is located north of Johnstown in the central part of the state. Laketown is between Johnstown and Middle City in terms of size of population.

As for the schools themselves, they are considerably different from each other. Aside from the fact that three are Multiunit and three are not, the schools also differ in terms of size and in terms of physical plant and facilities. They also differ considerably in organization. Specifically, how much they differ is the problem of this dissertation, but in the following brief descriptions of each school some of the more gross differences will be noted.

1. Johnstown--Washington School (Multiunit; 24 teachers and unit leaders)

Washington is, according to informants from the University of Wisconsin R & D Center, the best developed of the Multiunit Schools. It is the only Multiunit School in Johnstown. It is located in one of the lower socio-economic areas of the town, and the appearance of the building supports that fact. The interior of the building is rather dark, but one is surprised when he enters the building at the amount of pupil activity in the halls and classrooms. The principal's policy is that "everyone in the school (visitors included) is a teacher," so visitors are likely to be stopped and questioned by pupils.

Washington School has five units as opposed to the normal K-6 organizational structure. Each of the units has its own Learning Materials Center. Usually, the unit leader, the instructional aide and the clerical aide are attached to the Center. The teachers in the school are assigned to classrooms, but the students change from one teacher to another according to their ability levels. No child stays with the same group of children all day. Washington's five units are the most units found in any Multiunit School in the study.

The unit teachers meet every day for 30-40 minutes. During these meetings, the teachers plan the day's activity, evaluate the instructional program, evaluate childrens' progress, pass on information concerning instruction and so on. The members of the units seem to be closely tied together and depend on each other considerably, but the degree of dependence varies from unit to unit.

Washington also has the best developed Instructional Improvement Committee of all the Multiunit Schools. It meets twice weekly to discuss the administration of the entire school.

Perhaps the most characteristic part of the school at the time that the data were gathered was the great enthusiasm that the school personnel had for the Multiunit approach. The enthusiasm for the process of teaching or for the school itself was not as great in any other school in the sample.

2. Johnstown--Adams School (Traditional; 25 teachers and team leader)

The Adams School is quite the opposite of Washington. Its physical plant is new and quite modern. The interior of the building is bright, but one is surprised by the lack of students in the hallways. There is none of the chaotic movement of children that is so characteristic in Washington.

Adams has the more traditional organizational structure of K-6. The exception to this is the 2nd grade which operates as a team. There are no aides assigned to each grade and there is little stress for the teachers to work with each other except in the team. The principal is noted by most teachers as the man who coordinates the school, but most of the work of the school appears to be done by the teacher, autonomously, in the classroom.

The enthusiasm that is so characteristic of Washington School is not noted here.

3. Middle City--Jefferson School (Multiunit; 28 teachers and unit leaders)

Like Adams, Jefferson School is in a new physical plant. The building was specifically designed and built to house the Multiunit School. The school is laid out geometrically into four units. The central part of the school contains the administrative offices, the Learning Materials Center and faculty rooms. The kindergarten unit (Unit A) is in one of the other parts. The other two parts contain parts of Units B, C and D, which are grades 1-6. The school is characterized by the physical distances that exist between the various parts, and there seems to be little interaction among people across these distances.

The units are somewhat larger than those in Washington. There are only two kindergarten teachers, and Units B, C and D range from three teachers plus unit leader, to eight teachers plus unit leader. The relations to the principal are not as strong as in Washington, and the principal claims that he has little to do with the operation of the school. Each unit appears to be "a little school within itself" (Dudley, Smith, Pellegrin, 1969). As we shall see, the effects of unit size may effect the division of labor.

4. Middle City--Madison School (Traditional; 21 teachers)

Madison's physical plant closely resembles Washington's, but unlike Washington, the traditional atmosphere pervades the building. The building looks very much like the school described in Up the Down Staircase (Kaufman, 1964).

The teachers again are autonomous, and most learning activity takes place in the self-contained classroom. The principal and many of the teachers seem to value a stricter discipline than in most of the schools. There are two features that separate this school from the other traditional schools:

(1) there is a teacher aide for the first grade teachers, and

(2) the sixth grade has one class devoted to gifted children.

There are few required relationships between teachers, but the principal makes every effort to create "informal," friendly relations. There is an effort to improve the school by accelerated use of technical innovations, but there are few attempts at organizational innovations.

5. Laketown--Lincoln School (Multiunit; 19 teachers and unit leaders)

Like Jefferson, Lincoln School was especially designed to accomodate the Multiunit School. The physical plant of the school consists of two large circular buildings. One is set aside for physical education and large classes; the other is the main portion of the school. In the center of the main instructional building are the administrative offices, the Learning Materials Center, film projection rooms, and other special educational facilities. The outer ring of the building consists entirely of classrooms. The building is so designed that there is little distance between any classroom and the Learning Materials Center.

There are only three unit in Lincoln. There is one large unit, seven teachers and one unit leader, and two smaller units of about equal size. There are two professionals assigned to the Learning Materials Center. There are aides (both instructional and clerical), and there is a special "unit leader aide" to serve all the unit leaders.

The principal in this school plays less of a role in the actual operation of the school. This is less planned than a by-product of a recent disagreement between the unit leaders and teachers and the principal. Few teachers see the principal's job as closely related to theirs. The school has the disadvantage of being the "showplace" of the Multiunit system.

6. Laketown--Kennedy School (Traditional; 23 teachers)

Kennedy is the most difficult school of all to characterize. It is a "new" school, but is developed along the traditional lines. It has a young principal, and is attempting to innovate both in technical and social areas, but it has not developed any major organizational changes in which to do this.

In terms of organization and physical plant, Kennedy resembles Adams School in Johnstown.

These brief characterizations of the schools should be of some help in understanding the organizations with which we will be dealing. In the following section the study of the division of labor will be discussed.

The Task Structure of Organization Members and Organizational Power

In the first part of this report it was noted that the task structure of organization members and their relationships were "assumed" fact; that is, the task structure is always noted as a determinate of other organizational arrangements, but this is rarely empirically tested. This is not surprising, for the methodological issues surrounding the study of task allocation are difficult. It requires making some decisions in an arbitrary manner. This is the case here.

In the research conducted by the Attributes Projects, the school personal in the six schools in Wisconsin were asked to list the main tasks that they performed in their positions within the schools. Very little restriction was placed on the respondents in naming these tasks. In attempting to analyze the tasks listed for a different problem in the

Attributes Projects, it was noted that the tasks seem to fall into several "functional" categories; that is, a considerable number of these tasks fit together because the process involved--planning, evaluation, teaching, etc.--seemed to be the same, but the people with whom the task was performed, and the object that the process was directed toward, differed. Because of the complexity of dealing with the long lists of tasks, it was difficult to make sense out of them. In searching for a technique to allow for a more systematic method of classifying these tasks and for analyzing the task structure in relation to other variables, factor analysis was decided upon.

There were primarily two reasons for choosing this technique:

(1) Given the work that had been done with the development of the functional categories, there was evidence that the factors can be described and labelled.

(2) More importantly, we can get a score on each individual respondent on each factor. As will be seen, this score represents the basis of the study. By using the individual's score for each factor, the relationship of that factor to the variables of power can be measured. It is also the case that the relationship of that factor to certain social psychological variables can be computed.

The postulates that were given in the first section of the report form the basis of the questions that we can ask of the data once the scores of individuals on each factor have been determined. Remembering that the task structure of the school personnel is indicated by their factor scores on each factor, the following statements can be made in a testable form.

(1) There will be a correlation between the ranks of individuals on

certain factors and their ranks on independent measures of authority, influence and esteem.

Once the scores for the individuals in a school have been determined for each factor, these scores are ranked. Questions 2, 3, and 4 (See Appendix A) were developed as measures of authority, influence, and esteem, respectively. The above were ranked according to the number of times a person was named. (In the case of Question 2, the ranking is a result of weighted scores.) Using Kendall's Tau (Hays, 1963) as the technique, rank order correlations can be determined. It should be the case that some of the factors are highly correlated with rankings of the three power variables. This is the operational statement of the relationship between the task structure and the power variables.

It should not seem strange that the concept of power has been broken down into three components: influence, authority, and esteem. Studies of organizations (for instance, Dubin, 1968) and studies of stratification (Kelley, 1967) indicate that these words represent, conceptually, three different aspects of power. Close examination of Questions 2, 3, and 4 shows that there is a different conception involved in each case.

Authority is conceived of as an organizational variable (Dubin, 1968). That is to say that one has authority because others in the organization agree that an individual has the right and/or the responsibility to make certain decisions. Further examination of Question 2 will demonstrate that, in this case, authority is more broadly conceived than a formal chain of command. It comes from more than one prescriptive system. (See Choice B, Question 2, and the first part of this report.)

Influence, on the other hand, indicates having a control over resources or some personal abilities that give a person power. Dubin (1968) says that influence is not an organizational variable. Here it is operationalized as those people who are likely to get things done (Question 3).

Finally, esteem is seen as power that results from personal characteristics of individuals that allow the person to deal with certain situations. Question 4 deals with this question in a limited sense. Essentially it asks, "which people do you respect for having good ideas in meetings?" There are two parts to esteem: (1) personal characteristics and (2) "situations." The argument can be made that esteem is a result of authority and influence because decision-making (the exercise of power) provides those situations where people can demonstrate their ability. However, if this relationship does not hold and there is a difference between influence and authority, the following hypothesis should hold true:

(2) The factors that correlate with the three power types will differ according to the power type (authority, influence or esteem).

Finally, it should be remembered that we are dealing with two different types of school organizational systems: the Multiunit and the traditional types of schools. We have made the argument that the Multiunit School is more of a bureaucracy in that it has a more developed hierarchy and that there may be greater specialization of tasks among the production workers (teachers and aides). If this is true, then the following hypothesis should hold:

(3) The relationships indicated in 2 above will be higher correlations ($p < .05$) between certain factors and different power types in Multiunit Schools than in traditional schools, even though the correlated factors may be the same for each school.

The basis for making this hypothesis is simply that if the task structure is related to the power variables it follows that the more sophisticated the task structure, the more effect the task structure should have on the power variables.

At this point, it is of little use to try to state in any greater detail the relationship between the task structure of school personnel and the power variables. After the factor analysis has been discussed (Chapter III), a more complete statement of these relationships will be given.

The Task Structure and Certain Social Psychological Variables

There are two questions that we can raise concerning the relationship of task structure and the socio-psychological variables at the present time. The relationship of task structure and job satisfaction/perceptions of rewards can be at least partially explained as a step in combining "person-centered analysis" and "group-centered analysis" (Bates, 1966).

Bates has made the argument that the way a person behaves and the way a person feels about the way to behave are a result of several different factors. The way a person feels (his attitudes) is in part determined by the social system he is involved in, and the _specific_ situation he finds himself in, within that social structure. Taking this as a basis for studying the relationship between task structure and job satisfaction and task structure and perceptions of rewards, the Attributes Projects has asked three series of questions that should be useful and will allow the formation of the following hypothesis.

The first question that was asked had to do with job satisfaction (See Question 5). In ten items, respondents were asked to rate whether or not they were highly satisfied, somewhat satisfied, somewhat dissatisfied, or highly dissatisfied with things as they were in their school. In original data tabulations, the Attributes Projects could find no significant difference in job satisfaction between Multiunit and control schools. The question can now be rephrased and stated in a testable form:

(4) There will be a direct correlation between the individual factor scores on some factors and scores on the job satisfaction scale.

Essentially, this means that within the task structure of certain positions (or categories of people), there are some important tasks where the performance of these tasks makes the job satisfaction of that individual greater. The more important this task is to the individual, the greater his satisfaction. Of concern here is to identify those factors, if any, that are highly correlated with job satisfaction. Again, Kendall's Tau will be used as the correlational measure.

The other social psychological variable that is of interest is the perceptions of rewards. On a five point scale, school personnel were asked to note whether they felt administrators and teachers would strongly approve--strongly disapprove of 13 different items of teacher behavior. The same question was asked in terms of teachers, that is, would teachers approve or disapprove of the behavior of teachers along the 13 items.

(5) There will be a direct correlation between the individual factor scores on some factors and scores on the perception of administrative rewards scale and the scores on the perception of teacher rewards scale.

The analysis of this question does not include some of the items on the original Attributes Projects questionnaire. This is because they are "ideological" questions as opposed to organizational behavior questions on the part of teachers.

Summary of the Study

In this section and the previous one, the questions concerning the relationship between power variables and the task structure and between certain social psychological variables and the task structure have been described. In each case, the technique for testing that particular statement was generally stated. As the data are analyzed and reported, the techniques for testing each hypothesis will be more completely delineated.

More generally, the basic structure of the research is that of six replications of the same study. That is, each school will be treated as a case study of these relationships in an organization and each will be considered a replication of the other. There are, of course, methodological problems that have not been mentioned here that are of importance and that will be noted in the appropriate place in the data reports.

A Special Note on Data Manipulation Techniques

It is most probable that this particular study could not have been done a year ago using these data. That it can now is largely due to the computer techniques developed by George Lewis in his dissertation (as yet untitled) called STGPROC (string process). The fact is that the data manipulation requirements for this dissertation and the Attributes Projects are quite different, and, in the past, the same data would have had to be coded twice in order to accomodate the needs of both sets of research. That data can now be stored in close to original form and coded after it is punched on computer cards makes it possible to do this research and the

Attributes research from the same data. In the following paragraphs, the processes that the data will go through will be briefly described.

The data were coded in non-fixed field strings. This means that a closer approximation to the respondent's answer could be made by using the same words that the respondents used as opposed to coding the answers numerically. In a real sense then, the "original" data are simply transcribed and "machine punctuated" onto the cards. Incidentally, this process reduces the possibility of coder error significantly (See Lewis, 1969).

Once the data are in the machine, a code can be developed from the particular theoretical notions of the researcher. This code can then be fed into the machine as additional data and it will combine responses much in the same manner that a human coder would combine responses in a numeric code. The code that is fed into the machine is referred to as a thesaurus. The thesaurus used thus far in the Attributes Projects and the thesaurus for the present research are different and were developed along different theoretical dimensions.

Once the data can be coded by the use of a thesaurus representing a particular theoretical perspective, it can be analyzed either in its original form or by converting it to a numerical code. The main importance of this is that the original data are still available to be recoded for different purposes.

In the present case, the data on tasks have been converted to a numerical code. On a card, each of the various tasks has been assigned a column. Then each respondent's responses were assigned to a card and those tasks that he listed were assigned a "1" on the card. All other tasks (columns) were assigned an "0." Once the cards were developed for each respondent in the study, Ø coefficients were computed for the task matrix.

The Ø coefficient matrix was punched onto cards by the computer, and the factor analysis was computed from this matrix. The orthogonal verimax rotation will be used. The factor analysis program is part of the BMD (Bio-Medical) series of the library of the Statistical Laboratory and Computing Center, University of Oregon (UOBMDX72).

The score for each individual respondent on each factor was computed and punched onto a card with that respondent's score on the other questions discussed. The computations of Kendall's Tau were performed using the Scientific Subroutine Package developed by International Business Machines, Inc. (K RANK).

CHAPTER III

THE TASK STRUCTURE OF SCHOOL PERSONNEL

In the previous chapters, questions were raised concerning the task structure of organization members and its relationship to other organizational variables. In addition, a description of the six elementary schools in which these questions will be tested was given. In the following two chapters, the evidence concerning the above relationship will be examined, and in the final chapter the consequences of our findings will be explored. The present chapter is a brief discussion of the task structure of the school personnel. Because the techniques used in the present study are newly developed and are in the exploratory stage of development, such a discussion seems warranted if the following chapters are to be understood.

The Task Question and the Thesaurus

In order to determine the tasks that reachers and other school personnel performed in the regular course of their jobs, the Attributes Projects asked the following question:

> If you were to write a job description for your present position, you could approach the matter in various ways. At one extreme, you could categorize your work very broadly--for example, a teacher could say he spends 80 per cent of his time teaching, 10 per cent planning, and 10 per cent evaluating. At the other extreme, he could list relatively minor tasks such as sharpening pencils or moving desks. What we would like for you to do below is to describe your job at a level between these very broad and very specific approaches.

> Please think of the main sets of tasks or dimensions of your job. List the tasks on the lines below.

The respondents were then given twelve lines in which to respond. (Some of the respondents actually listed up to 18 tasks. The average number of tasks listed was 11.)

Note that the question is worded in such a way as to try to limit the responses to a sort of "middle level" of task description, but the attempt was not spelled out in any greater degree than necessary. This is because no effort to collect this kind of data had been undertaken before and it was felt that, rather than take a chance on building in a bias, it would be better to let the school personnel respond in a manner that allowed them the greatest possible choice. In other words, the research at this point was completely exploratory.[1]

Once the data were collected, they were transcribed and "machine punctuated" onto computer input cards. It was noted in Chapter II that the responses were not numerically coded by the coders. This operation can now be done by the researchers using the STGPROC series developed by Lewis. Because the data for this study were numerically coded three times, a review of the thesaurus and the coding process should be explained further (cf. Lewis, 1969).

The coders transcribed each task listed onto a code sheet using the words of the respondent. The basic structure of the transcription was approximately the same structure as an English sentence (subject, verb, indirect object, direct object). For instance, one respondent listed "Teaching math to three ability groupings of pupils." This was transcribed "TEACH MATH PUPILS." Note that the subject "I" was not coded as it remains the same for all responses. Note also that the operation (TEACH), the direct object of the operation (PUPILS) and the item passed to the object (MATH) are all retained. In other words, everything that is needed to describe the task listed has been preserved.

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[1] It should be noted that while the respondents were completing the forms, several members of the research team were around to answer any questions of interpretation that the respondents might have.

Once the transcription process was completed the data were punched onto the cards, a preliminary run was made on the computer to punch out the thesaurus cards. In the case of the example card listed above, the card received from this run would take the following form:

```
THES (  ,  ) = 'TEACH MATH PUPILS';
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In addition, the computer prints out a frequency distribution of the number of times each specific record was listed by all respondents. This set of thesaurus cards forms the basis of the coding system.

The next step was to code the data numerically, using the thesaurus. This step was accomplished by simply going through the thesaurus cards (the computer cards) and classifying them into categories. The first time this was done with the present data categories were developed using the verbs and the direct objects. This yielded 43 categories. The appropriate code numbers were then "gang punched" into the thesaurus cards and these cards, along with the data, were submitted to the computer to obtain a deck of cards numerically coded. This process is more completely described by Lewis in his forthcoming dissertation.

Examination of the 43 original variables revealed that the data that were collected could not be accurately coded at this level of specificity.

For instance, a number of school personnel listed only one word (the verb) for each task. For example, a large number of personnel in each school listed "planning." Other respondents were more specific and would indicate what they were planning ("planning curriculum"), and still others were more specific and would list the other people involved in the planning or for whom they were planning ("planning curriculum unit" or "planning math curriculum grade 3"). Because all school personnel did not respond at the same level, it was necessary to recode the data at the lowest common denominator, in this case, the verb.[2]

When the data were recoded using only the process (or the verb of the respondent's sentence) as the basis for categorization, 14 categories were developed. The categories and the headings for the task subset are listed in Chart 1 on the following page (Also see Appendix B).

It should be pointed out at this time that this arrangement of the 14 variables that we could identify as part of the task structure of individuals in organizations leaves a great deal to be desired. Theoretically, it is not only the process (planning, teaching, etc.) that should make a difference in terms of power arrangements in schools, but, in addition, the other people with whom the actor behaves should also be taken into account. As we shall see, this inability to account for the differences will affect the outcome of the present study, but this does not preclude findings that indicate direction and levels of study. The ideas found in the first two chapters continue to have implications both for organizational theory and for the sociology of education.

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[2] In most research projects, a recoding of the data would be a large operation calling for the coders to review all the data and new cards punched in the new categories system. Using the program developed by Lewis, this job (which normally takes weeks) was done in two or three days.

Chart 1: The Task Categories for the Six Schools and the Headings for Each Task Subset

Task Categories	Subset Headings
Attend Meetings	Attend meetings others, attend meetings parents, attend meetings staff, attend meetings unit, public relations, guide parent/teachers
Clerical Duties	Clerical duties
Discipline	Discipline
Evaluate Others	Evaluate own work, evaluate others, evaluate unit
Evaluate Pupils	Evaluate pupils
Grow Professionally	Confer professionals, grow professionally
Guidance	Guide pupils, guide individuals
Manage Rooms	Manage rooms-create atmosphere
Plan Materials (Alone)	Plan alone
Plan with Others	Plan staff, plan unit, prepare unit
Prepare Self	Prepare self
Supervise Pupils	Supervise pupils
Supervise Staff	Supervise staff, supervise paraprofessionals
Teach	Teach individuals, teach non-academic subjects, teach

In the remaining two sections of this chapter, the manner in which the tasks of school personnel differ from school to school and the task structure of school personnel in each school will be examined.

The Task Frequencies by School

When the tasks were combined into the categories listed in Chart 1, there were a total of 931 tasks listed by the personnel in the six schools. This is an average of 7 tasks for each of the 132 respondents. Note that by combining the tasks into these categories the respondents, have, on the average, "lost" 4 tasks per person. Most of this difference can be explained by the teaching and planning categories. Many teachers would list several tasks that fell into teaching (teach math, teach music, teach art, etc.) and planning (plan lesson, plan math, plan curriculum, etc.).

Table 1, on the following page, shows the frequencies of the task categories for the six schools, the three Multiunit Schools, and the three traditional schools. It is interesting to note that the rank order correlation in Table 1, between the task frequencies of the Multiunit Schools, and of the traditional schools is .57 ($p < .10$). This being the case, it cannot be said that there is a great statistical difference between the Multiunit Schools and the traditional schools in terms of the rank ordering of task frequencies. It should be noted that the first four variables in Chart 1 are the same rank for both types of schools, as is the last variable. However, 20 "inversions" occur between the remaining 9 variables; these account for the fairly small correlation, and indicate to some degree the changes brought about by the Multiunit School system.

It should be pointed out that serendipity plays a part in this study in that the number of respondents from Multiunit Schools and traditional

Table 1: Frequencies of Task Category Mentioned: Six Schools, Multiunit Schools, and Traditional Schools

Task Category	Six Schools	Multiunit	Traditional
Attend Meetings	84	39	45
Clerical Duties	67	27	40
Discipline	42	17	25
Evaluate Others	46	23	23
Evaluate Pupils	91	45	46
Grow Professionally	51	23	28
Guidance	70	34	36
Manage Rooms	66	29	37
Plan Materials (Alone)	94	49	45
Plan with Others	49	35	14
Prepare	68	28	40
Supervise Pupils	62	25	37
Supervise Staff	30	20	10
Teach	111	57	54
Total	931	451	480

No. of Respondents = 132
No. of Multiunit Respondents = 66
Avg. Task Per Respondent = 7
No. of Traditional Respondents = 66

schools is 66. For this reason the frequencies for the two types of schools represent unbiased reports.

This can be demonstrated better if we examine the six schools indi-

Table 2: Frequencies for Each Task Category by Schools

Task Category	Wash.	Adams	Jeff.	Madison	Linc.	Kenn.
Attend Meetings	11	16	10	17	18	12
Clerical Duties	6	13	9	13	12	14
Discipline	2	5	7	12	8	8
Evaluate Others	9	9	9	12	5	2
Evaluate Pupils	13	18	12	14	20	14
Grow Professionally	5	8	6	8	12	12
Guidance	15	16	4	8	15	12
Manage Rooms	8	14	8	12	13	11
Plan Materials (Alone)	12	19	13	14	24	12
Plan with Others	11	6	12	4	12	4
Prepare	7	19	7	13	14	8
Supervise Pupils	10	13	7	16	8	8
Supervise Staff	7	5	6	3	7	2
Teach	20	22	15	17	22	15
Total	136	183	125	163	190	134
No. of Resp.	22	26	16	20	28	20

vidually. Table 2 is the frequency distribution of the 14 variables for the six schools.

Of course, the frequency distributions are a little difficult to use in trying to see if there are patterns among the schools. Table 3, on the following page, is a matrix of the rank order correlations among the six

Table 3: Matrix of the Rank Order Correlations of the Frequency Distributions of Task Categories Between Schools

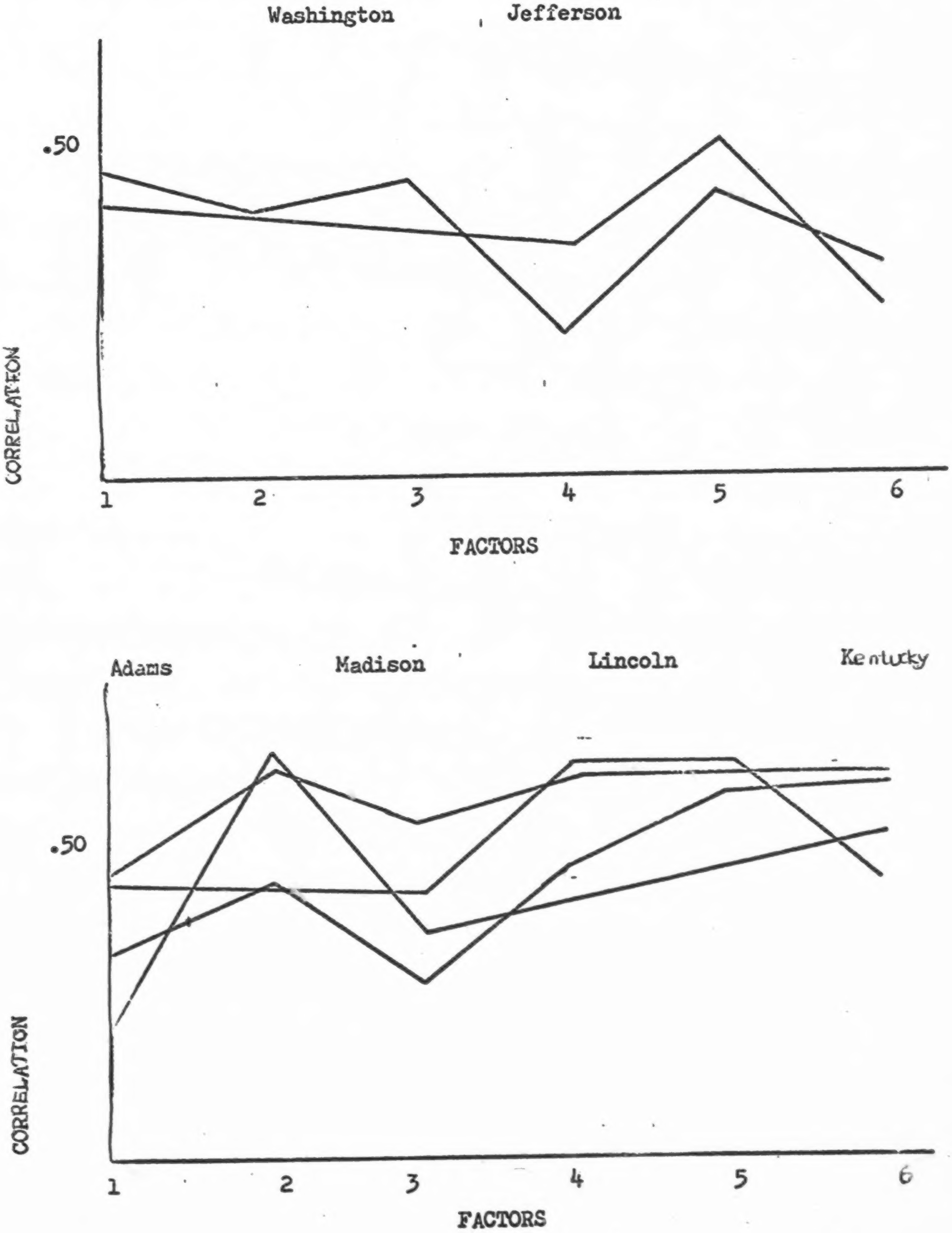
	Wash.	Adams	Jeff.	Madison	Linc.	Kenn.
Wash.		.41	.47	.21	.46	.35
Adams	.41		.42	.65	.65	.44
Jeff.	.47	.42		.36	.54	.28
Madison	.21	.65	.36		.61	.52
Linc.	.46	.65	.54	.61		.60
Kenn.	.35	.44	.28	.52	.60	

schools.

Completing a cluster analysis of this matrix (shown on the following page), two distinct clusters of two schools each can be identified. Two of the Multiunit Schools, Washington and Jefferson, and two of the traditional schools, Madison and Kennedy, cluster. The two remaining schools, Adams and Lincoln, more closely resemble the traditional school cluster than the Multiunit group. This may be accounted for, in part, by size. Adams is the second largest school of the six, and is, of course, a traditional school. Lincoln is the largest school in the sample, and is, remembering its' description in Chapter II, the Multiunit School that has its physical plant so arranged that it resembles three small schools operating independently.

In any case, there is some difference in task structure of the schools between Multiunit and control schools, but the difference cannot be established with any degree of specificity and does not appear to be very great.

Chart 2: Cluster Analysis of Task Frequency Correlations



To further describe the task structure in the schools, the next section is a description of the factor analysis of the task question.

The Task Structure of School Personnel

In order to see what kind of relationships existed between the various tasks and how tasks were related to individuals in the schools, a factor analysis of the data was obtained. The factor analysis solution was based on an orthogonal verimax solution and was executed using the UOBMD-X72 program at the University of Oregon computing center. This analysis is based on the rotation method in Jennings (1966). Aid in interpreting the factors is based on the additional sources of Fruchter (1954), Horst (1965), and Rummel (1967). The solution obtained by the factor analysis resulted in a set of factors that are, theoretically speaking, more than satisfactory.

The chart on the following two pages shows the factor loading of each of the task categories on each factor. In the labelling of the factors, only those task categories with high positive or negative loadings were used in the labelling process. The labels that were decided upon are:

Factor I-------Administrator
Factor II------Child-oriented teacher
Factor III-----Class-oriented teacher
Factor IV------Planner
Factor V-------Supervisor (of pupils)
Factor VI------Extra school activity

These factor labels were particularly pleasing solutions in that references to these types of school personnel are abundant in both popular and

Chart 3: Rank Order of Factor Loadings of Each of the Task Categories, by Factor

Factor I	Factor II	Factor III
Supervise Staff (.74)	Guide Pupils (.71)	Teach (.81)
Plan with Others (.70)	Prepare (.06)	Plan with Others (.07)
Attend Meetings (.25)	Manage Rooms (.02)	Supervise Pupils (.05)
Grow Professionally (.17)	Supervise Staff (.00)	Evaluate Staff (.04)
Evaluate Staff (.07)	Plan with Others (.00)	Plan Materials (.02)
Teach (.05)	Supervise Pupils (.00)	Prepare (.02)
Prepare (.04)	Evaluate Staff (-.03)	Manage Rooms (.00)
Plan Materials (-.03)	Grow Professionally (-.06)	Discipline (-.01)
Supervise Pupils (-.10)	Teach (-.10)	Clerical Duties (-.02)
Clerical Duties (-.12)	Plan Materials (-.24)	Evaluate Pupils (-.11)
Evaluate Pupils (-.17)	Evaluate Pupils (-.31)	Supervise Staff (-.18)
Guide Pupils (-.24)	Attend Meetings (-.48)	Guidance (-.21)
Discipline (-.34)	Discipline (-.50)	Attend Meetings (-.33)
Manage Rooms (-.64)	Clerical Duties (-.63)	Grow Professionally (-.69)

Chart 3 Continued

Factor IV	Factor V	Factor VI
Plan Materials (.58)	Supervise Pupils (.87)	Evaluate Staff (.13)
Evaluate Pupils (.31)	Attend Meetings (.30)	Supervise Pupils (.02)
Attend Meeting (.21)	Manage Rooms (.15)	Discipline (.01)
Discipline (.18)	Plan with Others (.07)	Supervise Staff (.00)
Prepare (.13)	Guidance (.07)	Plan Materials (-.09)
Supervise Pupils (.02)	Teach (.05)	Plan with Others (-.12)
Guidance (-.07)	Discipline (.04)	Attend Meetings (-.12)
Teach (-.11)	Prepare (.02)	Manage Rooms (-.15)
Supervise Staff (-.11)	Grow Professionally (-.02)	Guidance (-.20)
Grow Professionally (-.13)	Supervise Staff (-.03)	Teach (-.21)
Plan with Others (-.16)	Clerical Duties (-.10)	Clerical Duties (-.30)
Manage Rooms (-.22)	Evaluate Staff (-.17)	Grow Professionally (-.38)
Clerical Duties (-.42)	Evaluate Pupils (-.22)	Evaluate Pupils (-.42)
Evaluate Staff (-.64)	Plan Materials (-.32)	Prepare (-.81)
Eigenvalue 1.0		

academic publications.

As pointed out in an earlier part of this chapter, each person in the school has some relationship to each factor. The factor score of each individual was computed with the factor analysis and this number represents a person's relationship to a particular task in terms of all other respondents. In other words, the factor scores are correlated only in an ordinal sense, and the relationship of the task structure to other variables will be done using rank order techniques.

As a check on the "meaningfulness" of the factors, rank order correlations (τ) of the factor scores of every factor to every other factor was obtained by school. In general, the factors did not correlate in any of the schools. Those people who scored high on one of the factors did not generally score high on some other factor.

A more significant difference between the Multiunit Schools and traditional schools was discovered when the factor scores of the individual in the schools were totaled and averaged. This score was obtained for each factor by summing the factor scores in each factor, by school. Then each sum was divided by N for that school to account for the differences in N. Table 4, on the following page, shows the averaged scores for each school.

Looking at the average scores in Table 4, and by comparing the schools by district, the differences in the Multiunit School and the traditional school in that district can be seen. As we noted earlier, the Washington School in the Johnstown school district was considered by the research personnel in the Attributes Projects to be prototypic of the Multiunit School concept. Note the difference on the six factors of the Washington School

Table 4: The Average Factor Score per Factor, by School

	Wash.	Adams	Jeff.	Madison	Linc.	Kenn.
Administrator	.44	-.05	.38	-.19	.13	-.48
Child-Oriented	.69	.11	-.22	-.51	.06	-.15
Class-Oriented	.38	.18	.36	-.10	-.07	-.37
Planner	-.14	.08	-.03	-.22	.31	.07
Supervisor	.20	-.001	-.07	.50	-.22	-.01
Extra School Activity	.32	-.21	.19	-.07	.06	.12

and the Adams School. Washington schools scores are considerably higher on all factors except planner. It should be noted that the planner factor is defined by a high factor loading in the category "planning materials alone," and the Washington School has a system in which the planning is done primarily in the units. Therefore, it seems logical to say that the differences in the two schools follow a pattern that we would expect.

The same holds true for the comparisons of the Jefferson-Madison schools and the Lincoln-Kennedy schools. But note that there are differences in direction in the planner and supervisor factors. In the Washington-Adams schools, the Multiunit School (Washington) scores lower than the traditional school on planner and higher than the traditional school on supervisor. In the other two school districts, the direction on these variables is reversed. This makes a considerable difference when we look at the differences between Multiunit Schools and the traditional schools. Table 5, on the following page, shows these relationships.

Table 5: The Average Factor Score per Factor, by Type of School

	Multiunit Schools (N = 66)	Traditional Schools (N = 66)
Administrator	.31	-.23
Child-Oriented Teacher	.21	-.16
Class-Oriented Teacher	.20	-.08
Planner	.08	-.01
Supervisor	-.05	.15
Extra School Activity	.14	-.07

Kendall's Tau = -.73 $p < .003$

An examination of Table 5 reveals that the relationship of the Multiunit School to all of the factors is positive for all factors other than supervisor, and that the relationship of the traditional school to all factors other than supervisor is negative. Further, when these relationships are examined using a rank order correlation technique, the difference between the Multiunit Schools and traditional schools becomes more evident. The score is -.73, indicating that the task structures of the Multiunit Schools and the traditional schools are developed along different dimensions. Looking at the average scores in Table 5, these dimensions can be seen. The traditional schools are negatively related to all factors other than supervisor. This finding supports that argument that traditional schools are "babysitting" institutions. The Multiunit Schools score positively on all factors other than supervisor, and score highest on administrator, indicating that these schools are developing along the lines of coordination of teaching activities that are both child- and class-oriented.

If we were to look for extreme cases of the Multiunit Schools and the traditional schools, we would have to choose Washington School in Johnstown as the Multiunit School and Madison School in Laketown as the traditional school. Washington shows high positive scores on the administrator, child-oriented teacher and class-oriented teacher. Madison School scores negatively on all factors except for a fairly high score on supervisor. All other schools fall somewhere in between, with major differences occuring on only two out of the four factors.

From this, a definite difference in the task structure of the schools can be seen, and the difference is greater between Multiunit Schools and traditional schools than the differences between the Multiunit Schools or the differences between the traditional schools. In the next section we will summarize the findings.

Summary

In this chapter, the task structures of the schools in the present study have been examined. The major finding of this chapter is that while people in the schools all perform tasks that fall into the same task categories, the performance of those tasks varies from school to school and between types of schools. Briefly reviewing the findings of this chapter:

(1) When distinctions between schools were attempted by a correlation of the frequency distributions in each task area and a cluster analysis

of the correlation matrix, differences between schools were discernable, but the distinction between Multiunit Schools and traditional schools were not as clear.

(2) When the factor analysis was executed, both differences between schools and the differences between Multiunit and traditional schools were more readily discernable. Table 4 shows the differences between the Multiunit School and the traditional school in each district. In addition, there are differences between the three Multiunit Schools on the factors planner and supervisor. Washington School scores higher on the supervisor factor and lower on the planner factor, while the other two Multiunit Schools reverse this relationship.

(3) When Multiunit Schools are compared to traditional schools, the Multiunit Schools are positive on all factors other than supervisor, while the traditional schools are negative on all factors other than supervisor. To further demonstrate these differences, the rank order correlation between the two sets of schools is -.73. This indicates, on closer examination of the scores in Table 5, that the Multiunit Schools are directed more toward teaching (both child- and class-oriented) and administration, while the traditional school is more oriented toward supervision.

Given these differences in the schools, Chapter IV will investigate the relationship between the task structure and the allocation of power in the schools.

CHAPTER IV

TASK STRUCTURE AND THE ALLOCATION OF POWER

In this chapter, an examination will be made of the relationship between task structure and the power distribution in schools. Before presenting the data concerning this relationship, however, there are two facets of the study that must be discussed. In Chapter II, reference was made to the fact that additional consideration must be given to (1) what other researchers had reported in terms of power relations in schools, and (2) additional expectations concerning the relationship between task structure and power allocation.

This chapter will deal first with a brief review of past research and some problems that are evident in that research. Then a brief description will be made of the additional expectations resulting from the analysis of the task factors in Chapter III. Finally, the analysis of the relationship between task structure and power will be discussed.

Studies of School Organization and Power

Several studies of organization and power have been done within schools. Unfortunately, these studies tend to reflect some of the more basic problems found in organizational theory. In the first chapter, the argument was made that researchers tend to use one school of organizational theory to construct models of behavior and another school of organizational theory to "operationalize" the model for empirical research. The concept of "position" was used as an example.

Position is used by the open-system strategists to connote the relationship of one actor to a set of other actors in a relevant situation. Position is used by the closed-system strategists to indicate a holder of an "official title." In a school system, for instance, a teacher would, from an open-system approach, have a position, or several positions, which are formed by his relationship to pupils, other teachers, the principal, the parents, and so on. From a closed-system approach, the word "teacher" would describe the position that one held, but would be concerned only with the main function of the holder of that position, namely, teaching. Further, from a closed-system strategy point of view, the actual tasks that the teacher performs would be those that were "right" in terms of the prescriptive notions of the management or school hierarchy. The distinction made in Chapter III between a child-oriented teacher and a class-oriented teacher would have to be made formally, or it would probably never be perceived.

Since many researchers of educational organization do research based on the "official title" of school personnel, an examination of the consequences of such studies for research in school decision-making should prove interesting. In the following paragraphs, several major problems of research in the allocation of power in schools will be discussed.

(1) The most interesting problem is the restrictions placed on the study of power allocation because of certain "assumptions" made about school personnel stemming from a closed-system strategy. Despite the work of such researchers as Charters (1964:261), who states "that work coordination functions are not exclusively the work of administrative personnel," other researchers continue to assume that leadership (work

coordination) is done exclusively by administrative personnel. For instance, Gross and Herriott contend that the principal is the administrator that has the greatest potential for directly effecting the teaching and learning functions of the school (1964:1). There are two assumptions here that are questionable: (a) whether or not the principal's task structure relates him to the processes of teaching and learning, and (b) whether or not his administrative positions give him a greater power potential than others in the school system. The same problems appear in studies of teachers, superintendents, etc. (Borg and Sylvester, 1964; Gorden, 1957; Gross and others, 1958; Nimnicht, 1959; and Washburne, 1957).

(2) Because the number of positions is restricted to the number of official titles in a school, explanations of power differentials among the various people in the school are often based on demographic variables, for these variables can be examined with relative ease. Gross and Herriott, after making assumptions about the principal's potential for effecting the teaching-learning functions of the school, began to look at "age, sex, educational background (and) experience" as indicators of differential performance on the part of principals. To be fair, they also look at the effects of the leadership given the principal by higher school administration, and whether or not the principals are involved in certain types of decisions (Gross and Herriott, 1964:2, 150-168). But, adequate attention is not given to understanding the principal in the organizational framework in which he works. Explanation could be made of the differences in the principal's performance if the differences in the organizational milieu in which he exists were better understood, rather than from explanations using the demographic variables.

(3) The final question to be raised is whether or not assumptions concerning the tasks of "official titles" in the school are accurate or not. Are principals the only administrators that exercise influence, authority, and esteem, or are they limited only to the exercise of authority? Of course, the obvious answer is no, but the official title approach tends to lead researchers to this conclusion. Teachers, for instance, may and do score high on the administrator factor labelled in Chapter III. Does this mean that the teacher who scores high on the administrator factor will have more authority? Do all principals score high on the administrator factor and on authority? These questions, as well as the ones raised above, will be discussed in the following section.

Official Titles, Task Structure and the Allocation of Power

In the preceding paragraphs, several issues that have direct implications for the study of task structure and power allocation have been raised. Unfortunately, the data collected for the present study do not provide conclusive answers to all of these problems, but a good deal more insight is now available than before. In the following discussion, three questions will be of concern: (1) what is the relationship of the official title to the jobs that people actually do, (2) what is the relationship of the official title to the allocation of power, and (3) what is the utility of demographic variables in explaining power.

The first question, the relationship between what people actually do and their official title can be studied by examining the relationship between the task factor scores of individuals and their official titles. Table 6, on the following page, shows the factor scores of the principals

Table 6: The Factor Scores of Principals on the Six Factors, by School

	Wash.	Adams	Jeff.	Madison	Linc.	Kenn.
Administrator	-0.01	2.15	1.96	1.53	2.18	2.63
Child-Oriented Teacher	0.85	-0.14	-0.42	1.67	0.02	-0.89
Class-Oriented Teacher	2.10	0.57	0.48	-2.66	-0.19	-1.16
Planner	-0.24	-0.22	0.18	-1.43	1.10	0.69
Supervisor	0.80	-0.65	-1.05	0.50	-0.59	1.67
Extra School Activity	2.23	1.74	1.12	2.04	1.67	-0.93

of the six schools on each factor.

With the exception of one case, the principal of Washington School, all principals score high on the administrator factor. Principals in all but two schools rate higher on the administrator factor than anything else. These two schools, Washington and Madison, are an experimental school and a traditional school, respectively. Note, however, that four principals are oriented toward teaching either from a child-oriented perspective or a class-oriented perspective. In Washington, where the principal scores low on the administrator factor, he scores fairly high on both types of teaching activities. Only two score high on the planner factor, and only three on the supervisor factor. All principals but one score high on the extra school activity factor.

On almost every factor, principals' scores are uneven. The two factors where nearly all principals score high, the administrator factor and the extra school activity factor, are to be expected. That principals

Table 7: Average Factor Scores for Teachers on the Six Factors, by School (Unit and Team Leaders Excepted)

	Wash.	Adams	Jeff.	Madison	Linc.	Kenn.
Administrator	.20	-.14	.24	-.28	-.15	-.64
Child-Oriented Teacher	.82	.11	-.18	-.45	.06	-.11
Class-Oriented Teacher	.33	.16	.32	.03	-.04	-.33
Planner	-.07	.09	-.23	-.15	.28	.04
Supervisor	.03	.02	-.17	.50	-.33	-.14
Extra School Activity	.34	-.26	.05	-.18	.06	.05
	N=16	N=25	N=16	N=19	N=23	N=19

are left to define the rest of their task structure almost individually suggests that the relationship between official title and the actual positions of the principal varies from school to school.

This can be demonstrated in Table 6. Looking at the Washington principal, it can be seen that his job is defined primarily by the extra school activity and the class-oriented teacher factors. Note that he is negatively related to the administrator factor. In Adams School, on the other hand, the principal's job is defined by the administrator factor and the extra school activity factor. This is quite a different situs for the two principals to hold. Note also that this difference occurs among all the principals.

Table 7 shows the average factor scores for teachers on each factor, by school. In this table, it can be seen that the label of "teacher" is not very descriptive of a specific position, but rather the label of teacher includes many different types of personnel.

Note that there is not an even distribution of scores. Table 7, together with Table 6, demonstrates that the task structure within the official title categories vary. This indicates that explanation of differential performance and differential power may lie in other than the differences in demographic variables of the holders of official titles so often used by educational researchers.

The second question asked above was, what is the relationship between official title and power allocation? We can deal with that question in a briefer statement. The answer is, considerable. With only one exception, the principal in each school was most frequently named as having influence and esteem. The one exception can be accounted for by a school that was experiencing a great deal of conflict between teachers and principals at the time of the field study. This, seemingly, would then destroy the argument made above that official titles restricted the study of power allocation. It would, except for one fact in the Multiunit Schools. There was a shift in the authority scores in the Multiunit Schools. In the traditional schools, the principal scored high on authority as well as on influence and esteem. Quite often, in the traditional school the teachers would score more than a hundred points less than the principal on authority. In the Multiunit Schools, however, this was not the case. The teachers scores on authority were considerably higher in the Multiunit Schools than in the traditional schools. In the Multiunit School, a teacher and/ or a unit leader would sometimes score higher on authority than the principal. This fact supports the argument that official title restricts the study of power in schools, in that authority rests not only with the principal, but also with teachers. In short, in the Multiunit School the relationship between power and official title does not hold.

The third question, the relationship between the demographic variables and power allocation can be described in a brief statement. The correlations between the task factors and the variables, age, years of experience, years in school, years of education, were all too low to be conclusive. Their impact on determinations of power was varied. No one demographic variable is highly correlated with the same task factor that correlates highest with one of the power variables. Age and amount of education seem to make the most difference (in three schools out of six, they seem related to influence and esteem, but the relationship does not appear to be great). Years of experience and years in school are also related to the power arrangements in three schools, but the relationship is not as well defined. In general, it can be stated that there seems to be the same or less of a relationship between the demographic variables and power allocation than a relationship between task structure and power allocation.

In summary, the notion that the task structure of people within an official title category varies was substantiated by the data. In addition, the use of an official title model to explain differences in power allocation was brought into question. In the following section, the alternative model of defining categories by task structure will be examined.

Task Structure and the Allocation of Power

In the process of looking for a model, a better explanatory system, for discussing the allocation of power in the schools, a search of the literature in organizational theory was conducted (See Chapter I). Certain facets of the various schools of thought were examined and several criticisms of previous works, both in organizational theory and in the sociology of education, were made. From explorations into these two areas of research, certain ideas were developed concerning the relationships of the task structure of schools, the task structure of individuals in schools, and the allocation of power. These relationships, specified in Chapter II, were framed in three statements:

(1) there will be a correlation between the ranks of individuals on certain factors and their ranks on independent measures of authority, influence and esteem,

(2) the factors that correlate with the three power types will differ according to the power types, and

(3) the relationships indicated in the above statement will result in higher correlations between certain factors and different power types ($p < .05$) in Multiunit Schools than in traditional schools, even though the factors may be the same.

The purpose of this section is to test these statements with the data collected by the Attributes Projects. Before discussing the results, a brief review of the questions used to test these statements would be useful. In addition, extensions of the ideas concerning the relationship between task structure and power allocation can be made.

The Questions Concerning Power

In order to estimate who the powerful people in the schools were and to estimate the source of their power, three questions were asked. These questions are discussed in Chapter II (pp. 31-32), and the actual questions are found in Appendix A (Questions 2, 3, and 4).

Questions 3 and 4, dealing with influence and esteem respectively, were analyzed by simply counting the nominations and then rank ordering the people nominated by the number of times they were named. This is a variation of the reputational approach so often used in community power structure studies. The only difference is that by asking two questions, estimates of two power types can be obtained.

Question 2 (Appendix A), concerning authority, follows the same general pattern, but has the additional benefit of being able to estimate levels of authority. To obtain an authority score on this question the nominations were given a rank according to their category on each of the five items. Note that there are no nominations of others--only self nominations--for answer A on any of the items. In this case, the respondents were given a score of 1 for that item if they circled A. The people nominated in items B-E were given a score of 2, 3, 4, or 5, respectively. For instance, if the respondent circled B, then the people listed were given a score of 2; if the respondent circled C, then the people named were given a score of 3, and so on. These scores were then totaled by item.

The authority question deals with five items of a very broad nature: (1) choice of teaching methods used in the classroom, (2) scope and sequence of subject matter content, (3) choice of instructional materials other than textbooks, (4) pupil promotion, and (5) scheduling daily classroom activities. Because these decision-making areas cover a wide range of activity, a decision was made that the average score of a person on these five areas provided an estimate of his authority in the school. Each person's score on the five items was totaled and divided by the number of items. A score was assigned to each person and then the person was ranked according to the score. The test of the relationship between task structure and the allocation of power was then determined by computing a rank order correlation between the rank order of people on these three questions and a rank order of people by factor score on each of the factors.

Additional Considerations on the Relationship of Task Structure and Power Allocation

After the factor solution had been obtained, there were two additional statements that could be made about the expected results of correlating task structure and the allocation of power. These statements delineate more specifically the types of relationship expected.

(1) Power will not be highly correlated with those factors that have a high average factor score. Since power is based on the control of resources, it should be associated with those factors where there is a low average score. This assumes, of course, that all factors have equal importance in the school and that on some factors fewer school personnel are involved, thereby giving them control over an area of school life. Conversely, when the factor score is high, then that factor can be assumed to be shared by more of the school personnel, thereby reducing the amount of control that an individual(s) could obtain from it.

(2) Authority should remain more closely tied to the official title than influence and esteem, since authority is normally assigned to an official title in a formal organization. Great care should be taken in an-

alyzing this statement, however, because it has already been demonstrated that the official title is not necessarily associated with a particular task structure (See Tables 6 and 7, pp. 60 and 61, respectively).

These two statements and the questions concerning power raised in Chapter II of this report are examined below.

The Findings by School

In terms of the statements relating task structure and power made in Chapters I and II and at the beginning of this section, the findings of this study are, generally speaking, inconclusive. Table 8, on the following page, shows the rank order correlations between the task factors and the independent measures of influence, esteem, and authority, by school. Examination of this table will indicate why the findings are inconclusive in terms of the original hypotheses. In the following paragraphs, each school will be examined in turn. In each school, besides a general description of the data for that school, five topics concerning the task structure and power allocation will be discussed. These topics correspond to the three original statements and two additional statements concerning the types of relationships expected between the task factors and the scores on authority, influence, and esteem. These topics will be discussed for each school in the following order:

(1) that certain factors correlate with the three power types,

(2) that the factors that correlate with power types will differ according to power types,

(3) that the correlations between power types and the task factors will be higher in Multiunit Schools than in traditional schools,

Table 8: Rank Order Correlations (Kendall's Tau) of the Task Factors to the Scores on Influence, Esteem, and Authority, by School

	Washington School			Jefferson School			Lincoln School		
	Infl.	Est.	Auth.	Infl.	Est.	Auth.	Infl.	Est.	Auth.
Administrator	.17*	.28*	.08	.11	-.04	.02	.30*	.23*	.14*
Child-Oriented Teacher	-.04	.02	-.01	.00	.04	-.17	-.02	-.06	.01
Class-Oriented Teacher	.07	.14	.19*	.18	.28	-.27	-.15	-.02	.12
Planner	.06	.00	-.04	.23*	.35*	.24*	-.01	.09	-.11
Supervisor	.01	.03	-.05	.04	.14	.22	.11	.07	.06
Extra School Activity	-.16	-.23	.05	.04	.12	-.15	-.05	.05	-.03
	Adams School			Madison School			Kennedy School		
Administrator	-.06	-.13	.29*	-.46	-.46	-.20	-.05	.06	.19
Child-Oriented Teacher	.23*	.29*	-.02	.21*	.33*	.08*	.06	-.06	-.06
Class-Oriented Teacher	-.17	-.12	.00	.07	-.04	-.08	.35*	.36*	-.03
Planner	.04	.07	-.26	.04	.04	.08*	.13	.13	.29*
Supervisor	.15	.17	-.25	-.10	-.03	-.25	.06	.08	.20
Extra School Activity	-.07	-.12	.06	-.12	.21	.07	.10	.06	.12

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* Indicates highest rank order correlation between influence, esteem or authority for that school.

(4) that influence, authority, and esteem will not correlate positively with factors that have a high average factor score, and

(5) authority will remain more closely associated with official position than influence and esteem.

After each of the schools has been discussed, a summary of all schools will be made.

Washington School has only one statistically significant correlation. Esteem is rank order correlated with the administrator factor (.28; $p < .05$). Although the factor that correlates highest with influence is also the administrator factor (.17), the factor that correlates highest with authority is class-oriented teacher. All of the correlations are too low to provide confirmation of any of the expected relationships. It should be noted that influence and esteem are negatively correlated to the extra school activity factor. In terms of the five topics listed above, the Washington School data indicate the following relationships:

(1) There are no significant correlations between the three power types and the six task factors.

(2) The highest correlations for influence and esteem are with the administrator factor, but the authority scores correlate highest with class-oriented teacher.

(3) The hypothesis that the correlations in the Multiunit Schools will be significantly higher than the control schools is not confirmed.

(4) If a comparison is made with Table 4 (p. 52), influence and esteem have the highest correlation with the factor that has the second highest average factor score, and authority is correlated with the factor that has the third highest factor score. The expectation that the power

types would not correlate with factors that have a high average factor score is not confirmed.

(5) If a comparison is made with Tables 6 and 7 (pp. 60-61), it can be seen that the factor on which principals score highest is the factor that correlates highest with authority. The same score is third highest for the unit leaders and second highest for the teachers. Influence and esteem correlate highest with the factor that is the principal's fifth highest score. The expectation that authority will be most closely tied to official position is confirmed.

Adams School has higher correlations between the three power types and the six task factors, but none of the correlations are very large. The rank order correlations between authority and the administrator factor and between esteem and the child-oriented teacher are statistically significant ($p < .05$). Adams School relates to the five topics in the following way:

(1) While the correlations are more statistically significant, they still are not high enough to support the conclusion of a firm relationship between the task factors and authority, influence, or esteem.

(2) Influence and esteem correlate highest with the same factor (child-oriented teacher), but authority correlates high with the administrator factor.

(3) Since the highest correlations in Adams School are larger than the ones in Washington School, the expectation that Multiunit Schools will score higher than traditional schools is not confirmed.

(4) In comparing Adams School correlations with its average factor score per factor in Table 4, influence and esteem correlate with the fac-

tor with the second highest average score, authority correlates with the factor with the next to lowest average factor score. The expectation that the power types will not correlate with the factor with higher average scores is partially confirmed.

(5) In comparing the Adams School scores on Tables 6, 7, and 8, it can be seen that the principal scores highest on the administrator factor, which also correlates highest with authority. Teachers score low on the administrator factor. On the other hand, the principal scores low on the child-oriented teacher factor, which correlates highest with influence and esteem. The teacher's average factor score on this factor is the second highest. The expectation that authority will be more closely associated with official title is confirmed.

In Jefferson School, the planner factor correlates highest with all three power types. In this school, as with the others, the factors do not correlate at a statistically signficant level. Jefferson School relates to the five topics in the following manner:

(1) Since only the correlation between the planner factor and esteem is statistically significant, there can be no firm conclusion concerning the relationship between the task factor and the power types.

(2) Since all three power types correlate highest with the same factor, the expectations that the power types will correlate with different factors is not confirmed.

(3) Since the correlations between task factors and power types are not significant, expectation three is not confirmed.

(4) The expectation that the power types will not correlate with the task factors with the highest average factor scores is confirmed. Com-

parison of Tables 4 and 8 for Jefferson School indicate that the planner factor has the fourth highest average factor score and correlates with all three power types. This confirms the expectation that power will not be associated with the factors with higher average factor scores.

(5) The principal scores positively on the planner factor and the teachers score negatively. This planner factor, as already indicated, correlates highest with authority. This confirms the expectation that authority will remain associated with the official title. Both influence and esteem, in this case, are in this direction.

Madison School also has one factor that correlates highest with two of the power types. The child-oriented teacher factor scores highest with influence and esteem. The authority correlations are all so low that none will be considered. Madison School relates to the five topics in this manner:

(1) None of the correlations are high enough to come to a firm conclusion about the relationship between task structure and power allocation.

(2) Influence and esteem are correlated with the child-oriented teacher factor. This does not confirm the expectation that the power types will be correlated with different factors.

(3) The correlations between the power types and the factors are essentially as high as in the Multiunit Schools. This does not confirm the expectation that the correlations will be higher in the Multiunit Schools.

(4) Comparing Madison School on Tables 4 and 8, influence and esteem are correlated highest with the child-oriented teacher factor and this factor has the lowest average factor score of all the factors. This con-

firms the expectation that the power types will not correlate with those factors with higher task scores.

(5) Authority did not correlate sufficiently with any factor to estimate this relationship.

Lincoln School, like Jefferson, has one factor that has the highest correlation with only one factor. However, in this case, the task factor is the administrator factor. Also, the correlation of authority to the administrator factor is too low to be considered even directional. Lincoln School relates to the five topics in the following manner:

(1) None of the correlations are high enough to support the conclusion that the task structure and the allocation of power are related.

(2) Influence and esteem correlate highest with the same factor. This does not confirm the expectation that the power types will be correlated to the same factors.

(3) The correlations between the task factors and the power types are not statistically significant and the expectation that these correlations would be higher in Multiunit Schools is not confirmed.

(4) By comparing Tables 4 and 8 for Lincoln School, it can be seen that influence and esteem are related to the factor with the second highest average factor score. This does not confirm the expectation that the power types will be associated with the factors with low factor scores.

(5) There was not a sufficient correlation between authority and one of the task factors to test the expectation that authority would be associated with the official title.

Kennedy School has a higher rank order correlation than any of the six schools. There is a statistically significant correlation between class-oriented teacher and influence and esteem and between planner and authority. It relates to the five topics in this way:

(1) There is a large enough correlation between the task factors and the power variables in this school to confirm the relationship of the task structure and power allocation.

(2) Influence and esteem are correlated highest with the same factor. This does not confirm the expectation.

(3) The rank order correlations between the power types and task factors were all significant. Since this was a traditional school, however, the expectation that the Multiunit Schools would yield higher correlations was not confirmed.

(4) Influence and esteem were correlated with the child-oriented teacher which has the next to the lowest average factor score. Authority is correlated to planner which also has a fairly low average factor score. This confirms the expectation that power will not be related to those factors with a high factor loading.

(5) Comparing Tables 6, 7, and 8 for Kennedy School, authority is related to the third highest factor score for the Kennedy principal, and influence and esteem are related to the lowest factor score for the principal. The average factor scores for teachers on those factors related to power types are fairly low. This does not lead to a firm conclusion regarding the expectation that authority will remain associated with official title.

A Summary of the Findings for All Schools

Now that the findings have been reported by school, some general statements about relationships that were found can be made. Since, as was stated in Chapter II, this was primarily a report based on six case studies, most of the analysis of all schools will have to be general remarks made about what seems to be the case, rather than a more specific analysis of the six schools taken together.

There is no conclusive evidence that there is a consistent relationship between the task structure and the allocation of power in schools. In every school but one, esteem seemed to be more closely related to task structure than the other two power types. This means that the correlations between esteem and the task factors were higher and were statistically significant ($p < .05$). The correlations between esteem and the task factors were not as high as expected, and even though they are statistically significant, these correlations should be considered as directional only, rather than as conclusive evidence.

In addition, there was a statistically significant relationship between influence and the task factors in two schools, and between authority and the task factors in two schools. Again, these can be taken as directional indicators rather than as conclusive evidence.

At this point, it should be noted that while the correlations are not sufficient to confirm the relationship, the evidence does warrant further explorations into the possible ties between the task structure and the allocation of power. The reasons for this will be more fully explained in the next section of this chapter and in Chapter VI. In addition to those arguments, however, an analysis of the other questions raised concerning the task structure and the allocation of power yielded some interesting results, and these results suggest the need for further investigation. In the next few paragraphs these findings will be discussed, but it should be remembered that the relationships suggested are based on less than conclusive evidence.

One of the supportive arguments is that the second expectation, that the power types would correlate with different factors, was not confirmed. Considering only the highest rank order correlation between the task factors and the power types, influence and authority correlated highest with the same factor without exception. This becomes a more meaningful finding when it is remembered that the correlation between esteem and the task structure was the strongest of the three power types. This suggests that there may be some relationship between esteem and influence that may affect the findings of this study.

Authority correlates highest with the same factor as esteem and influence in only one school. In two other schools, the highest positive correlation between the task factor and authority was too low to consider as indicative of anything. In the three remaining schools, it did not correlate on the same factor as the other power types.

The third expectation, that the Multiunit Schools would have higher correlations between task factors and power scores, was not confirmed as no differences can be seen in the correlations in the two types of schools. The difference was expected because it was felt that the Multiunit Schools were more bureaucratic than the traditional schools. Given these data, the question cannot be discussed further.

The fourth expectation, that the power types will not correlate with factors which have a high average factor score for a school, was confirmed in four out of six schools. This suggests that the power variables are related to those task areas where fewer people are involved in the task area. If this were the case, a finer distinction in task areas than was possible in this study may have to be made to fully test the relationships expected. This will be more fully discussed in the concluding section.

The fifth and final expectation, that authority would remain more closely associated to official title than influence and esteem, was confirmed in three of the six schools and suggested in a fourth. The correlations of authority to the task factors were not high enough in two schools to test the question. It is the case that the task factor on which the principal scores highest is also the factor that has the high correlation with authority, but the principals score high on different factors.

These represent the basic findings concerning the relationship between task structure and power allocation in the six schools. In the following section, the conclusions and implications that can be drawn from these findings will be discussed.

Implications and Conclusion

The usual course of action that a social researcher would take at this point, given the findings in the previous section, would be to suggest further research. That is appropriate in this case, but it is not a suggestion that can be made lightly. The fact is that the expected results were not conclusively supported. In order to suggest further research, reasons must be given for the lack of proof of expected results and why further research could possibly yield those expected results.

These reasons will be briefly discussed in this section and expanded in Chapter VI.

There are three basic reasons why further research should be attempted: (1) the direction suggested by the results of the data analysis, (2) the problems that may be inherent in the data collection technique, and (3) theoretical indications that the unit of analysis may be poorly chosen. In addition to these reasons which are closely connected to the present study, there are two others that have to do with more theoretical and applied considerations. These are: (4) the long tradition of organizational theory and research that first led to the postulates, and (5) the implications of such research for both organizational theory and the sociology of education.

While most of the correlations between the task factors and power scores were not high, the analysis of the highest correlations in each school did show some direction. (a) Influence and esteem seem to be related to the same task factor in each school, indicating that there may be some interaction effect among the two. This being the case, the relationship of either one to the task factors would be effected by the other. Better methods of estimating esteem and influence should be developed before this line of research is abandoned. (b) Those task factors that correlated highest with the power types were not, generally speaking, the factors where the average factor score per school was high. This follows a general line of reasoning concerning power that is found in references to organizational arrangement from Weber's work in bureaucracy (1923) to Thompson's Organization in Action (1967:138-142). Much of this theory suggests that power is centered into positions that are not prevalent in the organization. This is similar to the notion that power is related to scarcity of resources of some sort. The fact that this relationship is supported by the data suggests further research. (c) Finally, the notion that authority seems to be more closely related to the official title than influence and esteem is supportive of the theoretical argument that authority is "an organizational variable," while influence and esteem are not (Dubin, 1968).

All of these findings support the idea that additional research in the area of task structure and power allocation should be done. In addition to the findings from the study, the manner in which the data were collected may also have something to do with the results being less than expected. The question on the task individuals performed (See Chapter III, pp. 38-43), was not sufficiently specific enough to allow for a complete analysis of the type reported here. Since the three types of information needed on each task (the verb, indirect object, direct object) were not available for each task, the task categories (See Chart 1, Chapter III), were too broad to allow for determining the tasks that few people in the organization do (See b above). Further research with a refined task question is suggested.

The theory on which this research is based (Thompson's concept of bounded rationality--See Chapter I), suggests that the wrong unit of analysis may have been chosen. While there was no way of anticipating this before the analysis of these data, it may be that the school has so little control over its own goals, resources, and technology, that to consider it the organizational base is impractical (See Thompson, 1967:Chapters III and IV). Perhaps the school district would be a better unit of analysis.

Another theoretical reason for additional research is that the long history of organizational research indicates that such relationships as the one between task structure and allocation of power should hold. That this relationship does not hold in this study, given the above comments, indicates that additional tests should be done before abandoning the area.

Finally, the implications of such research for both organizational theory and for education are too important. If the organizational arrangements do relate to the allocation of power, then explanation of this relationship is important for both theoretical and policy development.

In Chapter VI, these arguments will be expanded. The next chapter provides additional data on the effects of differential task structure in the six schools. After these relationships, between task structure and satisfaction, have been examined, a general statement concerning this research will be made.

CHAPTER V

THE RELATIONSHIP OF THE TASK STRUCTURE TO JOB SATISFACTION AND PERCEPTIONS OF REWARDS

In the previous chapter, relationships between task structure and some other structural variables were examined. This chapter will explore some of the relationships between the task structure of the individual and the satisfaction that he feels in being a member of the organization.

Previous Research

For some time researchers have been interested in the relationship of organizational variables to the job satisfaction of the worker. As was noted in Chapter I, the Human Relations School pioneered in studies of the "humanness" of the worker. As Etzioni (1964) points out, an early conclusion of these researchers was that the most efficient division of labor may not be the most effective, and that "the social capabilities" of the worker, as well as his physical capabilities, must be determined. These studies resulted in a series of studies, some of them very recent, that began to explore the "social psychology of organizations" (Katz and Kahn, 1965). In general, these studies have tried to establish the social motivations men have toward the work they do.

Central to this research were contributions by Herzberg (1964), Katz and Kahn (1965), and Hage and Aiken (1967). In these works the types of activities and structural arrangements that might affect the satisfaction of the worker were studied. Preceding these reports and following the lead of Lewin, studies of such factors as style of leadership (White and Lippitt, 1960), group cohesiveness and production (Schachter and others, 1960), and group cohesiveness and hostility (Pepitone and Reichling, 1960), were published. For the most part, these studies dealt with various types of organizational arrangements and how they affected the satisfaction of individuals in the organization.

Another group of studies took a more psychoanalytic view of the problems facing the organization. The underlying argument in this type of study (that frustrations and hostilities are increased in an unpleasant atmosphere of organizations) also finds its roots in the studies of Lewin and others. The difference between the psychoanalytic group and the group dynamics approaches to satisfaction in organizations is subtle, and focuses on the manner in which dissatisfaction is alleviated. The group dynamics approach actually tries to alter the group by making it structurally possible to alleviate fears, repressions, hostilities, etc., within the organization. The psychoanalytic approach attempts to alter the individual to make it possible for him to deal with hostility, repression, etc., within the organization. Studies of both these types were prevalent in the 1940's and 1950's.

More recent research has tended to move in the direction of the group dynamics approach. The development of T groups, sensitivity groups, and various other group dynamics techniques tends to substantiate this point. In fact, a number of large training programs concerned primarily with schools and school systems have been developed. The question of the relationship between organizational efficiency and worker satisfaction has therefore been of considerable interest during the years since the original studies mentioned above were conducted.

Critical Remarks Concerning Worker Satisfaction

Despite this growing interest, certain critical questions are still left unanswered. While there have been attempts to understand the worker's satisfaction or dissatisfaction in terms of the job he does, studies have taken only two main approaches.

(1) Many studies attempt to understand worker satisfaction in terms of the official titles of the worker. For instance, the researcher will ask if teachers in a given school are satisfied. As was discussed in Chapters I and IV, this does not lead to an understanding of worker satisfaction in any specific sense. The average satisfaction score of a school or any other organization does not take into consideration the various types of activity that may be done by people with the same official title. For example, from the perspective developed thus far in this dissertation the important question would be, which task factor seems to correlate with the highest satisfaction scores--i.e., which set of tasks, arranged in a certain way, makes people feel greater satisfaction. This is much more specific than the official title approach.

(2) The second approach often taken in attempting to fathom worker satisfaction is to try to develop a measure of those types of jobs that interfere with satisfaction to the greatest extent. This seems to be a rather fruitless task in the sense that the job, no matter how unsatisfying, cannot generally be avoided by the organization. The more important question is what the structural relationship between the tasks done by various organization members may be, and which of these structural ar-

rangements seems to produce the greatest satisfaction or dissatisfaction.

In the following paragraphs, using the task factors developed in Chapter III, an examination of the relationship between task structure and satisfaction will be conducted. The next section is a brief review of the questions used to measure job satisfaction and its corellary, perceptions of rewards.

The Questions Concerning Satisfaction

There are two sets of questions that are used to explore the relationship between task structure and worker satisfaction. The questions focus on (1) teacher satisfaction with the present teaching situation (in terms of both instrumental and expressive satisfaction), and (2) teacher perceptions of certain types of behavior as being either rewarding (approved) or non-rewarding (disapproved). The questions on rewards deal both with the approval of administrators and the approval of teachers. These questions are found in Appendix A.

The question of job satisfaction is arranged in a Likert-type scale. School personnel chose on a four point scale whether they were satisfied or dissatisfied with the ten elements of school life represented by the ten items. Items 1, 2, 5, 6, 7, and 10 represent instrumental or work related satisfaction, while 3, 4, 8, and 9 represent expressive satisfaction or satisfaction with personal relationships. This approach to job satisfaction follows the work of Herzberg (1964) and Hage and Aiken (1967), who see satisfaction as bi-dimensional rather than uni-dimensional.

A Likert-type scale was used on the questions concerning the perceptions of rewards. The respondents were asked to select one of five responses, indicating the extent to which administrators or fellow teachers would approve or disapprove of an "open inquiry" orientation. The question developed and used by the Attributes Projects contained thirteen items, but only seven of those items were used for this research. The seven items were positively stated, open inquiry oriented questions. When the respondent circled an approve answer it meant that he perceived open inquiry as being rewarded. The six items that were dropped from this question were positively stated toward a "closed inquiry" orientation.

There is a reason why only open inquiry questions were used. The questions represent an estimate of how much each person, especially each teacher, feels that he has control over his own activity. The obverse of this indicates a more rigid school, where the teacher is bound by a more "formal" system. Thus, these seven items give us an estimate of whether personnel perceive that creative, involved education is rewarded, or whether "playing the system" is perceived to be rewarded.

In the following section, the relationship between the task structure and job satisfaction will be examined. Next, the task structure-perceptions of rewards relationship will be discussed.

Task Structure and Job Satisfaction: The Findings

Table 9, on the following page, shows the rank order correlations between the task factors and scores on both instrumental and expressive satisfaction. As in the case of the correlations between task factors and the power variables, the correlations between work satisfaction and the task factors are not as high as expected. There are, however, some

Table 9: Rank Order Correlations (Kendall's Tau) for Task Structure and Job Satisfaction, by School

	Washington		Jefferson		Lincoln	
	Inst.	Exp.	Inst.	Exp.	Inst.	Exp.
Administrator	.21	-.02	-.06	.02	-.22	.12
Child-Oriented Teacher	.01	.05	.04	.01	.00	.10
Class-Oriented Teacher	-.06	-.23	.03	-.17	.05	.05
Planner	.01	.26	.43*	.28	-.06	-.08
Supervisor	-.19	-.02	.20	.13	.04	.11
Extra School Activity	-.50*	-.43*	-.06	-.24	.03	.05

	Adams		Madison		Kennedy	
	Inst.	Exp.	Inst.	Exp.	Inst.	Exp.
Administrator	-.06	-.04	-.19	-.12	.04	-.17
Child-Oriented Teacher	.21	.28*	-.10	-.21	.01	.32*
Class-Oriented Teacher	.01	-.21	.22	.10	.24	.34*
Planner	-.01	.06	.13	.12	-.08	-.05
Supervisor	.09	.05	.15	.09	.04	.08
Extra School Activity	-.20	-.07	.01	.17	-.28	-.03

$^*p < .05$

interesting observations that can be made concerning job satisfaction. In the following paragraphs a few observations concerning each of the six schools will be made.

In Washington School, the task factor that correlates highest with instrumental (work related) satisfaction is the administrator factor; the planner factor correlates highest with the expressive factor. The administrator factor has the second highest average factor score for Washington School, while the planner factor has the lowest average factor score. Note that the highest correlation between instrumental satisfaction and the factors is also the highest correlation between the task factors and influence and esteem. The highest correlation between expressive satisfaction and the task factor (planner factor) does not seem to be related to any of the power variables or the average task scores for the school.

Adams School represents a situation in which both of the satisfaction scores are correlated highest with the same task factor--child-oriented teacher. It is also the case that the child-oriented teacher factor is correlated highest with influence and esteem. There seems to be no relationship between authority and the highest average factor score in Adams School.

In Jefferson School, the same task factor--the planner factor--correlates highest with both instrumental and expressive satisfaction. The planner factor also correlates highest with all three of the power variables. There does not appear to be any notable relationship between the average factor score for the school and the planner factor.

Madison School is entirely different. Instrumental satisfaction is correlated highest with the class-oriented teacher factor, while expressive satisfaction is correlated with the extra school activity factor. Neither of these factors seems related to the power variables nor to the highest or lowest average factor scores for the school.

Lincoln School does not have any correlation between the task factors and satisfaction to even suggest direction. This school will not be taken into consideration in this section.

Kennedy School has a different situation from all the other schools. The highest correlation between the task factor and instrumental satisfaction is with the class-oriented teacher factor. Expressive satisfaction is correlated fairly high with two factors; both the child-oriented teacher factor and class-oriented teacher factor correlate about equally. Note that one factor, class-oriented teacher, correlates high with both expressive and instrumental satisfaction. This factor also correlates highest with the power variables, influence and esteem. Authority and the average factor score for the school do not seem to be related to satisfaction.

As can be seen from examining Table 9 and the above comments, a consistent relationship of expressive and instrumental satisfaction to the task structure cannot be substantiated by the data. As with the power variables, an analysis of the highest correlation between task structure and the satisfaction scores does yield some interesting directions that might be explored in greater detail and with better instruments.

(1) In four of five schools,[1] the task factor that correlated highest with instrumental satisfaction also correlated highest with the influence and esteem power variables. Further research might prove useful concerning this relationship.

(2) In three out of the five schools, the task factor that correlated highest with expressive satisfaction also correlated highest with in-

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[1] Since the correlations between satisfaction and task structure for Lincoln School did not yield high results, it was dropped from consideration of this question.

fluence and esteem. Given the relationship between influence and esteem discussed in Chapter IV, further research concerning the relationship of non-authoritative power to both types of satisfactions might prove useful.

(3) Since most of the correlations are fairly low, perhaps it might be best to consider other variables as ones that link directly to the instrumental and expressive types of satisfaction. Satisfaction is an estimation by the respondents of their personal feelings about how well they are operating in the system. A study of such a variable might require analysis from a completely different perspective. In Chapter I, the concepts of person-centered analysis and system-centered analysis developed by Bates (1960) were mentioned. In the analysis of the relationship between task structure and the power variables, the analysis was more concerned with a system. It could well be that person-centered analysis would be more relevant to the analysis of satisfaction than the system-centered approach.

In this section of the report, the relationship of the respondent's estimate of his own satisfaction to the task structure has been discussed. In the next section the relationship between the task structure and the respondent's estimate of those actions for which others will reward him will be examined.

Task Structure and Perceptions of Rewards

As indicated earlier in this chapter, the analysis of the perceptions of rewards attempts to discover perceptions of which types of behavior are rewarded by school personnel (See Appendix A, Questions 6 and 7). Table 10 shows the rank order correlations between the rewards for

Table 10: Rank Order Correlations (Kendall's Tau) on Task Structure and Perceptions of Rewards

	Washington		Jefferson		Lincoln	
	AR	TR	AR	TR	AR	TR
Administrator	.00	-.09	.06	-.21	-.09	.12
Child-Oriented Teacher	-.05	.02	.04	.21	-.18	.13
Class-Oriented Teacher	.34*	-.10	-.06	.40*	-.12	-.09
Planner	.25	.09	.11	-.19	-.23	-.15
Supervisor	-.17	-.09	-.13	-.04	.03	.21
Extra School Activity	-.02	-.05	-.28	-.14	.23	-.04

	Adams		Madison		Kennedy	
	AR	TR	AR	TR	AR	TR
Administrator	.09	-.05	-.15	.37*	.22	.07
Child-Oriented Teacher	-.20	.01	-.18	-.13	-.14	-.26
Class-Oriented Teacher	-.02	-.15	.07	-.10	-.03	.09
Planner	-.17	.05	.06	-.02	-.05	-.11
Supervisor	-.16	-.12	-.32*	.01	.11	.12
Extra School Activity	.02	.02	.07	.19	-.23	-.19

*p $<$ .05

open inquiry orientation and the task structure. In the following paragraphs, perceptions of rewards by administrators and fellow teachers are discussed.

In Washington School, the class-oriented teacher factor had the highest correlation with administrator rewards. It is interesting to note that this factor also had the highest correlation with the authority scores, and the principal's highest factor score (Table 6) was also on this factor. In this instance, there seems to be some relationship between the principal's task orientation and how school personnel perceive administrator rewards. From discussions with the principal during the data collection process, it was obvious that he favored an open inquiry orientation.

There was not a correlation between teacher rewards and the task factors that was sufficiently high to indicate direction.

Adams School did not have a correlation between the task factors and administrator or teacher rewards that was sufficiently high to indicate direction.

Jefferson School presents the strongest evidence of a relationship between perceptions of rewards and task structure. The highest correlation between administrator rewards and the task factors was with the extra school activity factor. The principal's score on this factor was also high. In addition, the highest correlation between teacher rewards and the task factors was with class-oriented teacher. Teachers rated highest on the class-oriented teacher factor (Table 7) in Jefferson School. This suggests that administrator approval of open inquiry will be perceived to be greatest by the people that score high on the same factor as he does. Also, the teacher approval of open inquiry is perceived to be greatest by the teachers who score high on the factor that represents the largest number of teachers.

Madison School does not have a correlation between the task factors and administrative rewards that is sufficient to suggest a positive relationship between task structure and perceptions of rewards. There is a fairly high negative correlation between the supervisor task factor and administrative rewards. Interestingly, the supervisor factor has the highest average factor score in the school. Thus, administrative personnel are not perceived as rewarding the task factor on which the teachers, on the average, score highest. As Table 8 indicated, the administrative factor in this school is negatively correlated with all three power types.

The relationship between the task factors and teacher rewards is also different in Madison School. The teachers report that the administrative factor correlates highest with the perceptions of rewards. This indicates that administrators would seem to approve of open inquiry in the school. The fact that the school actually has its highest average score on supervision of pupils (Table 4) further suggests the lack of power by the administrators.

Lincoln School follows the same general pattern as Washington. The highest correlation between the perceptions of administrator rewards and the task structures is with the extra school activity factor, which is also the factor on which the principal scores highest. The teacher reward factor seems to correlate highest with supervisor.

In Kennedy School, the highest correlation is between the administrator task factor and administrative rewards, but there is no correlation between the task factors and the perceptions of rewards by teachers that is high enough to suggest direction.

In summary, there were not enough correlations of sufficient strength to allow for even directional evidence concerning a relationship between the perceptions of approval for open inquiry or closed inquiry instruction (as would be indicated by negative correlations). There were only three schools where such directions could have been found for both teacher and administrator rewards, and no discernable pattern was found in those schools. The conclusion must be reached that the perceptions of rewards can be better understood by looking at other dimensions.

Summary

In this chapter, an examination of the relationship between job satisfaction and perceptions of rewards and task structure has been made. The following statements give a summary of the basic findings.

(1) There is no conclusive evidence of a consistent and positive relationship between task structure and job satisfaction.

(2) There is some evidence that there might be a relationship between non-authoritative types of power (influence and esteem) and both instrumental and expressive types of satisfaction. Further research on the relationship of task structure, influence, esteem, and job satisfaction should prove useful.

(3) Since all of the correlations between task structure and job satisfaction are low, other perspectives might be more useful in studying possible causal relationships.

(4) No significant relationship exists between task structure and perceptions of administrative and teacher approval of an open inquiry orientation. It is suggested that other perspectives be used in attempting to understand reward perceptions.

Unlike the conclusions reached in Chapter IV, it is not possible, on the basis of the directions found in these data, to suggest that further research be conducted concerning the relations of job satisfaction and perceptions of rewards to the task structure. Perhaps further refinement of the task question will lead to a reappraisal of this conclusion.

In the following chapter, a general summary of the entire study will be given. In addition, suggested changes in the questions for possible research in the future will be discussed, and the implications of the present research will be reviewed.

CHAPTER VI

SUMMARY AND CONCLUSIONS

This study was developed to explore some of the relationships of the task structure in organizations to the allocation of power, job satisfaction, and the perceptions of rewards. The data were collected as part of the Attributes Projects, CASEA. The organizations studied were six elementary schools in three school districts in a midwestern state. Three of these schools were "traditional," and the other three were schools using a new organizational structure--the Multiunit School.

Questionnaires were administered to 132 elementary school personnel. They were asked to list the main tasks that they performed and to nominate people in the school that they felt had power of three types--authority, influence, and esteem. In addition, the school staffs were given questions concerning job satisfaction and the types of behavior that they perceived as being rewarded by administrators and teachers. In this chapter, the findings of the study will be summarized, changes in techniques will be suggested, and the implications of the present research for both the sociology of organizations and the sociology of education will be examined.

Summary

After the review of the literature in the first chapter, an organizational perspective was developed using, as a basis, the works of Thompson (1967) and Bates (1960). Organizations are seen as multi-group structures attempting to achieve certain goals. The notions of formal and informal systems in organization are not considered useful for the present research, and the organization is considered as one behavioral system. Structural relationships exist, not only in the formal and informal systems, but also between what was formerly considered two systems. In addition, a relationship between power allocation and task structure exists in that the exercise of power is a part of the task structure.

In the second chapter the schools were described and the research design was discussed. A factor analysis of the task listed by teachers was planned. Once the factors had been extracted and labelled, rank order correlations could be computed between the factor scores of individuals and the scores of individuals on the power variables, job satisfaction, and perceptions of rewards. This provides a test for the following expectations:

(1) There will be a correlation between the ranks of individuals on certain factors and their ranks on independent measures of authority, influence and esteem.

(2) The factors that correlate with the three power types will differ according to power types (authority, influence, or esteem).

(3) The relationships indicated in (2) above will result in higher correlations ($p < .05$) between certain factors and different power types in Multiunit Schools.

(4) There will be a correlation between individual factor scores on some factors and scores on the job satisfaction scale.

(5) There will be a correlation between individual factor scores on some factors and scores on the perceptions of both administrative and tea-

chers rewards scales.

The factor analysis of the task question produced six factors: administrator, child-oriented teacher, class-oriented teacher, planner, supervisor, and extra school activity. These factors represent various positions held by the personnel in the six schools, and the factor scores for individuals represents that person's relation to the various positions. The task structure of the school was represented by the average factor scores of all school personnel.

The task structures of the Multiunit Schools were compared to the task structures of the traditional schools. A considerable difference was found. A rank order correlation (Kendall's Tau) of the average factor scores for the two types of schools yielded a -.73 correlation. Rank order correlations between the task factors and the organization variables mentioned above were then computed. The expected relationships between the task structure and the allocation of power existed in the data, but only to a moderate degree. In spite of this, a number of patterns were discovered that indicated that further research should be undertaken before a decision is made concerning the viability of the theoretical perspective used in this study.

Three basic findings support the need for further research concerning the relationship between task structure and power allocation in organizations: (a) influence and esteem seem to be related to the same task factor in the schools, (b) power seems to be located in the same task factor where fewer people score high, and (c) of the three power variables, authority seems to be more closely related to "official title."

Referring to (b) above, it is generally stated in organizational theory that power is allocated to those who have control over resources which are scarce. For example, if math becomes an important subject in a school, and a teacher who is competent in math is appointed to a curriculum committee, then he is likely to have considerable power over the entire curriculum. While the data in this study are not this specific, they did show that the power variables correlated highest with the task factors that have lower average factor scores. In addition, referring to (c) above, the fact that authority remains more closely associated with "official titles" supports the long-standing theoretical perspective that authority is an organizational variable. The source of authority is usually the organizational hierarchy (Dubin, 1968).

These findings support, to some extent, the relationship between the task structure and power allocation. This is one reason that further research is suggested. Two other reasons have to do with theoretical arguments, and a third is concerned with the data collection technique.

The major theoretical reason for suggesting further research is that the long history of organizational research indicates that the expected relationship between power allocation and task structure should hold. To accept the findings of this study as totally inconclusive would undermine much of the current organizational theory.

Another theoretical reason for continued research is the fact that the theoretical perspective underlying this study suggests that the unit of analysis may be ill chosen. While there was little way of knowing this before the present study, it may be the case that the school has so little control over its own goals, resources, and technology, that to consider it as the organizational base is inappropriate. As Thompson (1967) indicates, organizations must have control over their goals, resources, and technology in order to maintain their organizational identities. Perhaps the school district is a more likely organizational base for this type of research.

Finally, the technique used to collect the data needs to be refined. Because this report grew out of a larger research project, a perfect fit between the data and the theoretical perspective could not be expected. The major problem with the questions used to obtain estimates of the task structure is that they are not specific enough to get all the information needed. For instance, in Chapter III, the coding process was shown to contain three parts: the process (task), the person(s) toward which the process was directed, and finally the object or idea that was passed from the first actor to the second. An example of a complete response would be TEACH MATH PUPILS. Frequently the school personnel would not specify the task to this extent. The result was that the task categories were broader than originally intended and perhaps too broad to get at some of the dimensions essential for understanding both the task structure and its relationship to power allocation. In the next section of this chapter, a research plan that reaches these dimensions will be discussed. In general, it seems appropriate to recommend that further research be done.

The expectations concerning the relation of the task structure to job satisfaction and the perceptions of rewards were not realized. Since no consistent patterns in the correlations could be found, careful reconsideration of the expected relationship will have to be completed before any suggestion of further research along these lines can be made.

This section has discussed the findings of the study and recommended that further research be done in determining the relationship between the task structure and the allocation of power in the organization. The following section is a brief description of suggested changes in the technique of determining the task structure.

Suggested Changes in the Technique of Determining Task Structure

In order to obtain more satisfactory data for determining the task structure of the school, two changes are needed in the present question: (1) a way to insure that the respondent lists the tasks in a complete form, and (2) a way of relating the task to a particular group or set of groups in the organization. The following paragraphs briefly discuss methods of meeting these requirements.

(1) To insure that the respondent lists the task in a complete form requires only a slight rewording of the question and a different composition of the answer lines. The question should specify that to completely list the task will require identification of the process, the receiver of the action, and the object passed (the verb, the indirect object, and the direct object). In addition, the response lines should be broken into three parts and each column of lines labelled appropriately.

It should be noted that this type of response is possible only when the computer used by the researcher has string process capabilities. To code the tasks numerically with this degree of specificity would be difficult and the chance of error greatly increased. This particular form of coding the task responses was developed to meet the requirements of the STGPROC string process program system developed by Lewis (1969).

(2) The second problem, identifying the group or set of groups that

relate to various tasks, is more difficult, and will require that people be asked to identify the task that they perform in a certain group. This question is only partially answered in the direct object part of the task question. The question should be asked in such a way as to include all the groups that a person might belong to in the organization. For example, for research in schools a form of the question dealing with teachers might include these questions: (a) What classes do you teach? (b) What tasks do you perform in the classroom? (c) Are different tasks performed for each class? (d) What extra classroom tasks do you perform that are student related? (e) Do you have any administrative tasks?

If this type of data could be obtained then the task structure of the organization could be completely plotted, and better estimations could be made of the relationship between the task structure and other organizational variables.

Some Implications

While it is impossible to estimate the possible consequences of research, there are several important implications that stem from the present research for both organizational theory and the sociology of education.

(1) For organizational theory, the major implication grows out of the fact that we have developed a tentative method for understanding one of the basic structural variables--the task structure--and its relationship to other variables in the organization. In the first chapter, it was noted that task structure and other concepts related to the division of labor had become "assumed fact." Much of the research in organizations had been

based on some assumptions that the task structure and the division of labor have certain effects on other organizational variables. As methods for this type of research are refined, and these "assumptions" about organizations can be empirically confirmed or denied, a more general theory can be developed concerning such things as the relationships between power and production efficiency and the task structure of the organization and organizational effectiveness. The consequences for organizational theory cannot be specified clearly until further research is conducted.

(2) One of the more important implications for the sociology of education is a better description of the tasks of school personnel. At this time, there is no clear understanding of the task structure of the teacher, principal, aide, etc. Such information would be useful in discovering the tasks that interfere with or aid school personnel in the performance of their main function--teaching. In addition, knowledge of the task structure would be useful in estimating the impact of various innovations in the school.

(3) Whether or not the task structure is related to power variables may be important for a clear understanding of such processes as school desegregation. For example, does the assignment of both white and Negro teachers to the same school result in a desegregated school, or can the assignment of black teachers to certain tasks in the school result in a de facto segregation system?

(4) Finally, a better understanding of the teaching-learning process might be possible if the task structure of school personnel and the activities of children were studied. In this study, six different task factors were identified. How well do these factors complement the activity

factors that might be obtained by research on students?

These implications, as well as the findings of this report, lead to the conclusion that further understanding of the task structure, the division of labor, and other related concepts is essential.

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APPENDIX A

THE QUESTIONS

1. If you were to write a job description for your present position, you could approach the matter in various ways. At one extreme, you could categorize your work very broadly--for example, a teacher could say he spends 80 per cent of his time teaching, 10 per cent planning, and 10 per cent evaluating. At the other extreme, he could list relatively minor tasks such as sharpening pencils or moving desks. What we would like for you to do below is to describe your job at a level in between these very broad and very specific approaches.

   Please think of the main sets of tasks or dimensions of your job. List these tasks on the lines below.

   Task____

   Task____

   Task____

   Task____

   Task____

   Task____

   Task____

   Task____

   Task____

   Task____

   Task____

   Task____

2. This section asks about your participation in making certain decisions. For each item, select carefully the one statement that best describes your part in making the sort of decision indicated; then circle the letter beside that statement. If you circle B, C, D, or E, please enter also the names and positions of the other persons involved.

Item 1. CHOICE OF TEACHING METHODS USED IN THE CLASSROOM.

A. I choose my own teaching methods without assistance or direction.

B. The final choice of teaching methods is left to me, but there are others whose job includes making recommendations or suggestions. Please name the persons who make recommendations or suggestions.

Name	Position

C. Within certain limits I can choose my own teaching methods. Name other persons involved.

Name	Position

D. As a member of a group or committee I share with others the job of deciding the teaching methods to be used. Please name the other persons.

Name	Position

E. I do not choose my own teaching methods. They are laid down for me by others. Please name the other persons who prescribe them.

Name	Position

Item 2. SCOPE AND SEQUENCE OF SUBJECT MATTER CONTENT.

A. I choose the scope and sequence of subject matter content without assistance or direction.

B. The final choice of scope and sequence of subject matter content is left to me, but there are others whose job includes making recommendations or suggestions. Please name the persons who make recommendations or suggestions.

Name	Position

C. Within certain limits I can choose the scope and sequence of subject matter content. Name other persons involved.

Name	Position

D. As a member of a group or committee I share with others the job of deciding scope and sequence of subject matter content. Please name the other persons.

Name	Position

E. I do not choose the scope and sequence of subject matter content. This is laid down for me by others. Please name the persons who prescribe them.

Name	Position

Item 3. CHOICE OF INSTRUCTIONAL MATERIALS OTHER THAN TEXTBOOKS (for example, workbooks, visual aides, etc.)

A. I choose instructional materials for use by my pupils without assistance or direction.

B. The final choice of instructional materials is left to me, but there are others whose job includes making recommendations or suggestions. Please name the persons who make recommendations or suggestions.

Name	Position

C. Within certain limits I choose the instructional materials for use by my pupils. Name the other persons involved.

Name	Position

D. As a member of a work group or committee I share with others the job of choosing the instructional materials used by pupils. Please name the other persons.

Name	Position

E. I do not choose the instructional materials used by my pupils. These are prescribed by others. Please name the persons who prescribe them.

Name	Position

Item 4. PUPIL PROMOTION (for example, from grade 2 to grade 3)

A. I decide (without assistance or direction) whether or not one of my pupils is to be promoted.

B. The final decision on promotion of my pupils rests with me, but there are others whose job includes making recommendations or suggestions. Please name the persons who make these recommendations or suggestions.

Name	Position

C. Within certain limits, I decide whether or not one of my pupils is to be promoted. Name other persons involved.

Name	Position

D. As a member of a group or committee I share with others the responsibility for promoting pupils. Please name the other persons involved.

Name	Position

E. I do not decide whether or not one of my pupils is to be promoted. Please name the persons who make these decisions.

Name	Position

Item 5. SCHEDULING DAILY CLASSROOM ACTIVITIES.

A. I schedule daily classroom activities without assistance or direction.

B. The scheduling of daily classroom activities is left to me, but there are others whose job includes making recommendations or suggestions. Please name the persons who make recommendations or suggestions.

Name **Position**

____

____

C. Within certain limits I decide the daily schedule of classroom activities. Name other persons involved.

Name **Position**

____

____

D. As a member of a group or committee I share with others the job of scheduling daily classroom activities. Please name the other persons involved.

Name **Position**

____

____

E. I do not schedule daily classroom activities. This is done for me by others. Please name the other persons.

Name **Position**

____

____

3. If you wanted to receive approval from the faculty of your school for an idea you were proposing, it would sometimes be helpful to enlist the support of certain other individuals in your school. Please list below, by name and position, the individuals whose support for your ideas would help most in obtaining faculty approval.

Name	Position

4. In any school faculty, some individuals generally make suggestions for the solution of problems that are more useful and reasonable than are suggestions made by other individuals. Please list below, by name and position, those individuals in your school whose suggestions you would expect to be most useful in solving school problems.

Name	Position

5. Please indicate your own feeling of satisfaction regarding the following items by circling the letters in the appropriate column below. Indicate only one response for each item.

IN YOUR PRESENT TEACHING SITUATION, HOW SATISFIED ARE YOU WITH:	Highly Satisfied	Fairly Satisfied	Somewhat Satisfied	Highly Dissatisfied
1. the progress you are making toward the goal you set for yourself in your present position?	HS	FS	SD	HD
2. the adequacy and fairness of school and school district policies and regulations?	HS	FS	SD	HD
3. the extent to which your efforts and achievements are recognized by others?	HS	FS	SD	HD
4. your personal relationships with administrators and supervisors?	HS	FS	SD	HD
5. the opportunities you have to accept responsibility for your own work or for the work of others?	HS	FS	SD	HD
6. the ability and willingness of administrators and supervisors to give you help when you need it?	HS	FS	SD	HD
7. the extent to which you are able to see positive results from your efforts?	HS	FS	SD	HD
8. your personal relationships with fellow teachers?	HS	FS	SD	HD
9. your present job when you consider it in light of your career expectations?	HS	FS	SD	HD
10. the availability of pertinent instructional materials and aids?	HS	FS	SD	HD

6. Administrators in various schools tend to approve or disapprove of different kinds of teacher behavior. By circling the letters in the appropriate columns below, please indicate your best estimate of the reactions of administrators to the teacher behavior suggested by the following items.

ADMINISTRATORS WILL:

IF A TEACHER:	Strongly Approve	Mildly Approve	Neither	Mildly Disapprove	Strongly Disapprove
1. encourages pupils to discuss controversial topics that are timely.	SA	MA	N	MD	SD
2. follows only those school policies that he or she thinks are important.	SA	MA	N	MD	SD
3. makes frequent suggestions for changes in school policies.	SA	MA	N	MD	SD
4. seeks critical appraisal and help from other teachers.	SA	MA	N	MD	SD
5. experiments with new teaching techniques.	SA	MA	N	MD	SD
6. encourages pupils to disagree with opinions expressed by teachers.	SA	MA	N	MD	SD

7. Teachers in various schools tend to approve or disapprove of different kinds of teacher behavior. By circling the letters in the appropriate column below, please indicate your best estimate of the reactions of most of the teachers in your school to the teacher behavior suggested by the following items.

MOST TEACHERS IN THIS SCHOOL WILL:

IF A TEACHER:	Strongly Approve	Mildly Approve	Neither	Mildly Disapprove	Strongly Disapprove
1. encourages pupils to discuss controversial topics that are timely.	SA	MA	N	MD	SD
2. follows only those school policies that he or she thinks are important.	SA	MA	N	MD	SD
3. makes frequent suggestions for changes in school policies.	SA	MA	N	MD	SD
4. seeks critical appraisal and help from other teachers.	SA	MA	N	MD	SD
5. experiments with new teaching techniques.	SA	MA	N	MD	SD
6. encourages pupils to disagree with opinions expressed by teachers.	SA	MA	N	MD	SD

APPENDIX B

COMPLETE LISTING OF COMPUTER TRANSCRIPTIONS OF ALL TASKS, SIX SCHOOLS

NOTE: This is a complete listing of the computer transcriptions of the tasks listed by the school personnel in the six schools. The Roman numeral denotes a major task category; the capital letter represents a major subheading; and the Arabic numeral denoted the tasks listed by the teachers.

I. ATTEND MEETINGS

- A. Attend Meetings Others
    1. Administrate Merchants X
    2. Attend X Meetings
    3. Attend Meetings X
    4. Attend Meetings Pupils
    5. Attend Meetings Respondent
    6. Attend Meeting Supervisor
    7. Attend Meetings Therapists
    8. Attend Professional Meetings X
    9. Attend Workshops X
    10. Attend X Respondent
    11. Conduct Meetings X
    12. Give Reports X
    13. Have Conference X
    14. Represent School Association
- B. Attend Meetings Parents--Confer/Parents
    1. Attend Meetings Parents
    2. Attend Meetings Parent/Teacher
    3. Attend Meetings PTA
    4. Communicate Observation Parents
    5. Communicate X Parents
    6. Communication X Parent/Teacher
    7. Confer Discipline Parents
    8. Confer Program Parents
    9. Confer X Parents
    10. Contact X Parents
    11. Have Conference Parents
    12. Make Calls Homes
    13. Meet X PTA
    14. Meetings Room X
    15. Report Calls Home
    16. Report Progress Parents
    17. Report X Parents
- C. Attend Meetings Staff--Confer/Discuss Staff--Confer/Discuss Teachers
    1. Attend Meeting Faculty
    2. Attend Meetings Staff
    3. Attend Meetings Teachers
    4. Communicate X Faculty
    5. Confer Building Personnel
    6. Confer Curriculum Principal
    7. Confer Curriculum Unit Leaders
    8. Confer Plans Teachers
    9. Confer Pupils Teachers
    10. Confer X Respondent
    11. Confer X Staff
    12. Confer X Teachers
    13. Confer X Unit

C. (cont.)

14. Confer X Unit Leaders
15. Confer Visual Aid Material Interns
16. Confer Work X
17. Cooperate X Staff
18. Discuss Methods X
19. Discuss Plans X
20. Improve Instruction Committee
21. Meet X Faculty
22. Meeting X Staff
23. Meetings X School
24. Participate Improvement Committee
25. Sharing Experiences X
26. Suggest Innovations X
27. Work Committee Staff
28. Work X Committees

D. Attend Meetings Unit

1. Acts Member Unit
2. Attend Meetings Unit
3. Attend Meeting Unit 1
4. Conduct Meetings Unit
5. Lead X Unit

E. Communicate--Public Relations/ Visitors, Outsiders

1. Communicate Education Others
2. Confer Public Relations
3. Confer X Visitors
4. Develop Public Relations
5. Develop Relations Public
6. Discuss X Outsiders
7. Disseminate Information Outsiders
8. Explain Program Outsiders
9. Show School Visitors
10. Speech X Public
11. Write Information Public

F. Guidance Teacher/Parents

1. Assist X Teachers
2. Consult X Teachers
3. Cooperate X Teachers
4. Discuss News Pupils
5. Guidance X Parent
6. Guidance X Staff
7. Make Bibliographies Teachers

II. CLERICAL DUTIES

A. Clerical Duties

1. Answer Telephone X
2. Clerical Duties X
3. Clerical Task X
4. Clerical Units X
5. Clerical X X
6. Collect Aids
7. Collect Money Pupils
8. Complete Forms Respondent
9. Complete Report Respondent
10. File Catalog X
11. File Records Pupils
12. Keep Records X
13. Maintain Records Pupils
14. Make Reports X
15. Mend Books X
16. Organize Card Catalog X
17. Read Folders Pupils
18. Read Understanding Pupils
19. Record Grades Pupils
20. Record Growth Pupils
21. Record Progress Individual
22. Record Progress X
23. Replace Cards X
24. Report Progress Parents
25. Report Progress Pupils
26. Report X X
27. Study Records Pupils
28. Using Machine X

III. DISCIPLINE

A. Discipline

1. Correct Behavior Pupil
2. Discipline Behavior

A. (cont.)

Pupils
3. Discipline X Individual
4. Discipline X Pupils
5. Enforce Discipline X
6. Maintain Discipline Pupils

IV. EVALUATE OTHERS

A. Evaluate Work of Respondent

1. Determine Objectives X
2. Evaluate Curriculum X
3. Evaluate Feedback X
4. Evaluate Goals X
5. Evaluate Innovations Respondent
6. Evaluate Instruction X
7. Evaluate Instruction Respondent
8. Evaluate Lesson Respondent
9. Evaluate Lessons X
10. Evaluate Materials X
11. Evaluate Methods Respondent
12. Evaluate Objectives Respondent
13. Evaluate Plans Respondent
14. Evaluate Program X
15. Evaluate X Respondent
16. Evaluate Results Respondent
17. Evaluate Subjects X
18. Evaluate Success Respondent
19. Evaluate Teaching X
20. Evaluate Teaching Individual
21. Evaluate Teaching Respondent
22. Evaluate Work Respondent
23. Evaluate Work X

B. Evaluate Others

1. Evaluate Lessons Teachers
2. Evaluate Pupils Parents
3. Evaluate Work Interns
4. Evaluate X PTA
5. Evaluate X Staff
6. Evaluate X R&D Staff Consultants
7. Identify Strengths Teachers

C. Evaluate Unit

1. Evaluate Curriculum Unit
2. Evaluate Curriculum Unit 3
3. Evaluate Lessons Team
4. Evaluate Materials Unit
5. Evaluate X Team
6. Evaluate X Unit

V. EVALUATE PUPILS

A. Correct Work Students--Evaluate Pupils--Test Pupils

1. Administer Tests Pupils
2. Administer Tests X
3. Assess Needs Pupils
4. Check Papers X
5. Checking Paper X
6. Correct Assignment Pupils
7. Correct Books X
8. Correct Lessons Pupils
9. Correct Materials Pupils
10. Correct Papers X
11. Correct Papers Pupils
12. Correct X Paper
13. Correct Work Pupils
14. Correct Work X
15. Design Tests X
16. Determine Needs Pupils
17. Devise Tests Pupils
18. Diagnose X Pupils
19. Diagnose Abilities Pupils
20. Diagnose Need Pupils
21. Diagnose Problems Individual
22. Diagnose Problems Pupils
23. Diagnose Skills Pupils
24. Discover Interest Pupil
25. Discover Weakness Pupil
26. Evaluate X X
27. Evaluate X Pupils

A. (cont.)

28. Evaluate Abilities Pupils
29. Evaluate Assignments X
30. Evaluate Capability Pupils
31. Evaluate Learning Pupils
32. Evaluate Lessons X
33. Evaluate Lessons Pupils
34. Evaluate Material Pupils
35. Evaluate Needs Pupil
36. Evaluate Papers Pupils
37. Evaluate Performance Pupil
38. Evaluate Personality Pupil
39. Evaluate Problems Pupils
40. Evaluate Programs Pupil
41. Evaluate Progress X
42. Evaluate Progress Pupils
43. Evaluate Respondent Pupil
44. Evaluate Success Pupil
45. Evaluate Work X
46. Evaluate Work Pupils
47. Follow Progress Pupil
48. Give Tests Pupils
49. Grade Material X
50. Grade Papers Pupils
51. Grade Papers X
52. Grade X Pupils
53. Grade Work Pupils
54. Learn Needs Pupils
55. Locate Problems Pupils
56. Observe X X
57. Observe X Pupils
58. Reevaluate Abilities Pupils
59. Seeking Defects Pupils
60. Sense Needs Pupils
61. Tally Scores X
62. Test Abilities Pupils
63. Test Placement Pupils
64. Test X Pupils
65. Test X X
66. Testing X X
67. Testing Progress X

VI. GROW PROFESSIONALLY

A. Confer with Professionals

1. Communicate X Administration
2. Communication Central Office Interschool
3. Confer X Consultants
4. Confer X Educators
5. Confer X Nurse
6. Confer X Specialists
7. Consult District Consultants
8. Consult X Administration
9. Liaison R&D Staff
10. Refer X Psychologist
11. Respond Requests Nurse
12. Secure Help Consultant
13. Use X Personnel
14. Work X Professional

B. Grow Professionally Respondent

1. Advance Study X
2. Discover Innovations Respondent
3. Familiarize Curriculum Respondent
4. Familiarize Education Changes Respondent
5. Familiarize Method Respondent
6. Grow Professionally X
7. Grow Professionally Respondent
8. Improve Methods Respondent
9. Inspect Material X
10. Investigate Curriculum X
11. Learn Curriculum Respondent
12. Learn Methods X
13. Learn Songs X
14. Professional Reading X
15. Read Books X
16. Read Books Respondent
17. Read Bulletins X
18. Read Curriculum X
19. Read Manuals X
20. Read Professionally X
21. Read Professionally Respondent
22. Read Publication Respondent
23. Read Texts X
24. Reading Manuals X

B. (cont.)

25. Reading Professional X
26. Reading Professional Respondent
27. Research X X
28. Research Skills Respondent
29. Research Unitization X
30. Review X X
31. Screen Materials X
32. Select Materials X
33. Study Material X
34. Survey Texts X
35. Train Inservice Respondent
36. Work Library X

VII. GUIDANCE

A. Develop Student Abilities--Guide Pupils--Aid-Help Pupils--Motivate-Stimulate

1. Aid X Individual
2. Aid Achievement Pupils
3. Aid Behavior Individuals
4. Aid Initiative Class
5. Aid Interrelations Pupils
6. Assist Learning Center X
7. Assist Problems Pupils
8. Care Health Pupils
9. Confer X Pupils
10. Consult X Pupils
11. Counsel X Pupils
12. Counsel Problems Pupils
13. Develop Awareness Pupils
14. Develop Concept Pupils
15. Develop Ego Pupil
16. Develop Honesty Pupil
17. Develop Interests Pupils
18. Develop Physique Pupils
19. Develop Relations Pupils
20. Develop Resources Pupils
21. Develop Schedule X
22. Develop Self-Control Pupils
23. Develop Self-Image Pupils
24. Discuss X Pupils
25. Discuss Behavior Pupils
26. Discuss Problems Pupils
27. Encourage Reading X
28. Enhance Values Pupils
29. Explain Directions Pupils
30. Explain Innovations Pupils
31. Give Therapy Pupils
32. Guidance X Pupils
33. Guidance Activities Pupils
34. Guidance Ego Pupil
35. Guidance Enrichment Pupils
36. Guidance Growth Pupils
37. Guide X Pupils
38. Guide Advise Pupils
39. Guide Behavior Pupils
40. Guide Discoveries Pupils
41. Guide Interest Pupil
42. Guide Progress Pupils
43. Guide Reading Pupils
44. Guide Self-Image X
45. Help Enrichment Pupils
46. Help Needs Pupils
47. Help Problems Pupils
48. Help Remedial Pupils
49. Help Special Pupils
50. Improve Ego Pupil
51. Inspire X Individuals
52. Listen X Pupils
53. Make Learning Fun
54. Motivate Interest Pupils
55. Motivate Learning Pupils
56. Motivate Lessons Pupils
57. Motivate Presentation Pupils
58. Motivate X Pupils
59. Motivation X X
60. Provide Self-Expression Pupils
61. Reinforce Concepts Pupils
62. Reinforce Skills Pupils
63. Satisfy Needs Pupil
64. Setting Example Pupils
65. Stimulate Interest Pupils
66. Study Problems Pupils
67. Work Needs Individual

B. Guide Individuals

1. Aid Development Individuals
2. Counsel X Individual
3. Encourage Interests Individuals
4. Guidance X Individual
5. Guide Achievement Individual
6. Help X Individuals
7. Improve Attitude Individual
8. Talk Daily Individual
9. Work Problems Individual

VIII. MANAGE ROOMS

A. Create Atmosphere--Manage Room

1. Create Atmosphere Pupils
2. Create Atmosphere X
3. Create Experiences Pupils
4. Create Interest Pupils
5. Encourage Interest Pupils
6. Encourage Reading Pupils
7. Encourage Reading X
8. Enrich Subjects Pupils
9. Enrich X Pupils
10. Establish Enthusiasm Pupils
11. Extend Interest Pupils
12. Inspire Nonlistener Pupils
13. Inspire X Group
14. Introduce Enrichment Pupils
15. Maintain Building X
16. Manage Rooms X
17. Management Room X
18. Provide Atmosphere Pupils
19. Provide Enrichment Pupils
20. Provide Needs Individual

IX. PLAN MATERIALS (ALONE)

A. Plan Individual--Plan for Pupils--Plan Alone

1. Choose Materials X
2. Choose Methods X
3. Clarity Instruction X
4. Coordinate Lessons X
5. Coordinate Materials X
6. Decide Materials Individual
7. Design Methods X
8. Innovate Strategies X
9. Locate Materials Individual
10. Make Decisions X
11. Make Plans Respondent
12. Making Plans Groups
13. Organize X X
14. Organize Instruction Groups
15. Organize Materials Pupils
16. Organize Materials X
17. Organize Study Groups
18. Organize Unit X
19. Plan X X
20. Plan X Pupils
21. Plan Activities X
22. Plan Activities Teacher Pupils
23. Plan Audio Visual X
24. Plan Curriculum X
25. Plan Daily X
26. Plan Filmstrips X
27. Plan Future X
28. Plan Goals X
29. Plan Help Individuals
30. Plan X Individual
31. Plan Individually X
32. Plan Instruction X
33. Plan Instructions Individual
34. Plan Instruction Pupils
35. Plan Instruction Respondent
36. Plan Lessons X
37. Plan Lessons Pupils
38. Plan Lesson Respondent
39. Plan Materials X
40. Plan Math X
41. Plan Program X
42. Plan Reading X
43. Plan Remedial X
44. Plan X Respondent
45. Plan Schedule Auxiliary
46. Plan Skills X
47. Plan Subjects X
48. Plan Teach Lesson Pupils
49. Plan Teaching X
50. Plan Techniques Respondent
51. Plan Therapy Pupils

A. (cont.)

52. Plan T V Math Pupils
53. Plan Units X
54. Plan Units Respondent
55. Plan Work X
56. Plan Work Pupils
57. Plan Worksheets X
58. Program Materials Individual
59. Schedule Remedial Pupils
60. Select X Materials
61. Set Objectives X
62. Set Objectives Pupils
63. Write Lessons X X

X. PLAN WITH OTHERS

A. Plan with Staff--Develop--Plan with Teachers

1. Assemble Materials Teachers
2. Balance Curriculum X
3. Coordinate Program X
4. Develop Curriculum X
5. Develop Relations Teacher
6. Develop Resources Teachers
7. Discuss Planning Teachers
8. Discuss Policy Principal
9. Discuss Problems Personnel
10. Discuss Problems Teachers
11. Find Materials Teachers
12. Plan Assignments Coworker
13. Plan Curriculum Committee
14. Plan Curriculum Teachers
15. Plan Help Secretary
16. Plan Lesson Teacher
17. Plan X Others
18. Plan Tasks Parents
19. Plan Techniques Teachers
20. Plan Units Teachers
21. Plan X Staff
22. Plan X Supervisor
23. Select Materials Teachers
24. Sharing Experience Teachers
25. Work Committees X
26. Work Curriculum X
27. Work Professional Organization X

B. Plan/Unit

1. Acquaint Unit Respondent
2. Coordinate Activities Unit
3. Coordinate Curriculum Unit
4. Coordinate Effort Unit
5. Coordinate Material Units
6. Coordinate Planning Unit 3
7. Encourage Cooperation Units
8. Encourage Harmony Unit
9. Group X Pupils
10. Make Schedules Unit 3
11. Plan Curriculum Unit
12. Plan X Group
13. Plan Groupings Pupils
14. Plan Instruction Team
15. Plan Meeting Unit 4
16. Plan X Paraprofessional
17. Plan Help Paraprofessional
18. Plan Meetings Unit 3
19. Plan Program Unit 3
20. Plan Pupils Team
21. Plan Schedule Activities Unit 3
22. Plan Schedules Unit
23. Plan Subjects Unit
24. Plan X Unit
25. Plan X Unit 1
26. Plan X Unit 3
27. Plan X Unit 5
28. Plan Units Unit 2
29. Provide Time Unit
30. Select Materials Unit

C. Prepare with Unit

1. Acquire Material Units
2. Discuss Policy Unit Leaders
3. Organize Communication Skills Unit 3
4. Prepare Materials Units

C. (cont.)

5. Prepare Meeting Unit 4
6. Work X Unit Leaders

XI. PREPARE SELF

A. Prepare Respondent

1. Acquire Materials X
2. Arrange Equipment X
3. Arrange Materials X
4. Catalog Books X
5. Circulate Books X
6. Collect Materials X
7. Coordinate Communication X
8. Experiment Unitization X
9. Find Materials X
10. Gather Materials X
11. Gather Science Materials
12. Get Equipment X
13. Give Instructions Pupil
14. Grooming X Respondent
15. Locate Books X
16. Locate Materials X
17. Locate Material Pupils
18. Make Aids X
19. Make Improvements X
20. Make Tapes X
21. Make Visual Aids X
22. Making Lessons X
23. Manage Audio Vision X
24. Order Audiovisual Pupils
25. Order Books X
26. Order Films X
27. Order Materials X
28. Order Special Subjects X
29. Organize Material Pupils
30. Prepare X X
31. Prepare Activities X
32. Prepare Budget X
33. Prepare Classes X
34. Prepare Conference Pupils
35. Prepare Daily X
36. Prepare Enrichment X
37. Prepare Instruction X
38. Prepare Instruction Individuals
39. Prepare Lessons X
40. Prepare Lessons Respondent
41. Prepare Materials X
42. Prepare Materials Class
43. Prepare Materials Pupils
44. Prepare Music Respondent
45. Prepare Opening Exercise X
46. Prepare Presentations X
47. Prepare Pupil Advancement
48. Prepare Reading X
49. Prepare Report Card X
50. Prepare Room Individuals
51. Prepare Seatwork X
52. Prepare Seatwork Pupils
53. Prepare Subjects X
54. Prepare Subject Respondent
55. Prepare Supplies X
56. Prepare Tasks Pupil
57. Prepare Teach Respondent
58. Prepare Teaching X
59. Prepare Visual Aids
60. Prepare Work X
61. Prepare Worksheets X
62. Provide Materials X
63. Receive Materials X
64. Requisition Materials X
65. Resparation Task X
66. Schedule Activities X
67. Schedule Curriculum X
68. Schedule Materials X
69. Schedule People X
70. Schedule Radio Program X
71. Schedule Space X
72. Schedule Visual Aids X
73. Shelve Books X
74. Type Materials X
75. Type Worksheet X
76. Write Lesson X
77. Write Plans X
78. Write Reports X
79. Write Units X
80. Writing Nonclass X

XII. SUPERVISE PUPILS

A. Supervise Nonclass Pupils

1. Assign Homework Pupils
2. Assign Work Absences
3. Boardwork X X
4. Demonstrate Audiovisual Pupils
5. Direct Activities Pupils
6. Direct Choir Pupils
7. Direct Help Pupils
8. Duties Nonclass X
9. Duties Nonclass Pupils
10. Duties Room X
11. Give Information Absentees
12. Help Materials School
13. Keep Content Pupils
14. Management X X
15. Monitor X Pupils
16. Observe Activities Pupils
17. Observe X Pupils
18. Practice Songs Pupils
19. Supervise Activities X
20. Supervise Activities Pupils
21. Supervise Audiovisual X
22. Supervise Discipline X
23. Supervise Exercises Pupils
24. Supervise Lessons X
25. Supervise Nonclass Pupils
26. Supervise Nonclass X
27. Supervise Nonclass Respondent
28. Supervise Nonprofessional Staff
29. Supervise Performance Pupil
30. Supervise Physed Pupils
31. Supervise Play Pupils
32. Supervise Projects X
33. Supervise Research Pupil
34. Supervise Study Pupils
35. Supervise Tests Pupils
36. Supervise X Intern
37. Supervise X Pupils
38. Supervise X X
39. Take Responsibility Pupils
40. Tell Story Pupils

XIII. SUPERVISE STAFF

A. Supervise, Administer, Other than Student Staff

1. Administer Materials X
2. Advise Projects X
3. Advise Organization X
4. Aid X Intern
5. Allocate Materials X
6. Assign X Teachers
7. Assist Research Project X
8. Assist Skills X
9. Design Implement Objectives School
10. Direct X Interns
11. Direct X Teachers
12. Feedback Behavior Staff
13. Instruct Ideas Interns
14. Make Policy X
15. Manage X X
16. Perform Management Duties X
17. Promote Intercommunication Faculty
18. Research Library Interns
19. Supervise X Interns
20. Supervise X Staff

B. Supervise Manage--Paraprofessionals

1. Counsel X Paraprofessional
2. Direct Duties Aide
3. Explain Work Paraprofessional
4. Explain Work Secretary
5. Instruct Library Aides
6. Instruct X Aides
7. Instruct X Nonprofessional
8. Instruct X Paraprofessional
9. Train X Assistants
10. Train X Paraprofessionals

B. (cont.)

11. Work X Paraprofessional
12. Work X Student Librarians

XIV. TEACH

A. Teach Individuals

1. Individualize Instruction Pupils
2. Prescribe Instruction Individual
3. Teach X Individuals
4. Teach Remedial Individual
5. Tutor X Individuals

B. Teach Nonacademic Subjects

1. Coach X X
2. Teach Health Pupil
3. Teach Innovation Pupils
4. Teach Physed X
5. Teach Physed Pupils

C. Teach

1. Conduct Large Class
2. Conduct Small Class
3. Current Deficiency Pupil
4. Dramatize Lesson Pupil
5. Follow Up Teaching X
6. Give Instruction X
7. Instruct X Pupils
8. Instruct Library Pupils
9. Introduce Book Materials X
10. Introduce Materials X
11. Introduce Materials Pupils
12. Introduce Remedial Pupils
13. Introduce Units Pupils
14. Lead Discussions Pupils
15. Lead Discussion X
16. Lead Instruct X
17. Lead Instruction X
18. Perform Tasks Pupils
19. Present Lessons X
20. Present Material Pupils
21. Provide Seatwork Pupils
22. Reteach Skills Pupils
23. Reteach X Pupils
24. Teach Art Pupils
25. Teach Art X
26. Teach Basic Pupils
27. Teach Basic Subjects Pupils
28. Teach Class X
29. Teach Classes Pupils
30. Teach Communication Pupils
31. Teach Concepts Pupil
32. Teach Fundamentals Pupils
33. Teach Information X
34. Teach Language Arts Pupils
35. Teach Language Pupils
36. Teach Large Groups
37. Teach Lesson Pupils
38. Teach Lessons X
39. Teach Library Classes
40. Teach Library X
41. Teach Materials Pupils
42. Teach Math Pupils
43. Teach Mathematics Pupils
44. Teach Music Pupils
45. Teach Music X
46. Teach Numbers Pupils
47. Teach Pupils X
48. Teach Reading Pupils
49. Teach Remedial Pupils
50. Teach Remedial Reading Pupils
51. Teach Science Pupils
52. Teach Secondary Subjects Pupils
53. Teach Skills Pupils
54. Teach Skills X
55. Teach Small Groups
56. Teach Social Studies Pupils
57. Teach Spelling Pupils
58. Teach Studies Pupils
59. Teach Subjects Pupils
60. Teach Subjects X
61. Teach X Groups
62. Teach X Pupils
63. Teach X X
64. Teach Subject Unit
65. Teaching Subject Pupils
66. Work X Pupils